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Automotive Daily News

★CARS★ SHOP EQUIPMENT TRUCKS ★★AVIATION★★ PARTS ACCESSORIES ★TIRES★

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Harper Back With Willys After Many Years; Named Vice-President for Sales

TOLEDO, O., July 22.—Announcement of the election of Harry B. Harper as vice-president in charge of sales of the Willys-Overland Company, effective August 1, was made today by President L. A. Miller.

The election of Mr. Harper to one of the most important sales positions in the automobile industry brings back to Willys-Overland a man whose successful experience has been outstanding in the automobile industry since his initial association with Willys-Overland in 1911.

It was under Mr. Harper's leadership as general sales manager in 1916 that Willys-Overland brought to Toledo more than 8,000 dealers and bankers from every part of the United States in a convention which never has been excelled in the industry in dramatic consequences. During his leadership as general sales manager, the company rose to

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NEW SALES CHIEF

HARRY B. HARPER

Harry P. Branstetter, Chciago Dealer, Dies

Chicago, Ill., July 22.—Automobile Row here is today mourning Harry P. Branstetter, who died suddenly yesterday. Branstetter was a leading dealer in this city for more than twenty-five years. He entered the business as a dealfor the old Queen car, which passed out of the picture after a brief career. Branstetter then took the dealership for the Silent Northern, which also went out of business. About fifteen years ago he became connected as Chicago distributor with the Kissel organization, and he placed that car among the popular leaders in the Chicago market. For many years Branstetter was the leading Kissel dealer in the country in volume of sales and is reported to have reaped a fortune from that source.

H. P. Branstetter

No announcement regarding funeral arrangements has as yet been made.

SERVING TRADE WELL HELD PROSPERITY KEY AT S. A. J. A. SESSION

ASHEVILLE, N. C., July 22.—**A. S. Hatcher of Macon, Ga., president of Southern Automotive Jobbers Association, yesterday told delegates to the convention here they must serve the trade well if they expect to prosper with a great industry.**

"The automobile business is no small business and it is here to become larger and more useful as its scope of service widens. If we do our job of serving the trade well and do it at a profit we will survive to prosper with a great industry."

Routine matters and an address by

(Continued on Page 2)

July's Automotive Employment Touchest Year's Lowest Level With Vacation Season at Hand

WASHINGTON, July 22.—According to statistics just released by the Department of Labor, the automotive industry currently shows the heaviest rate of lay-off of any industry, with 10.57 per cent. of its employees out. This is a seasonal condition, July and August being the period when automotive plants run heaviest on vacations.

This is done because in most plants a considerable number of departments are closed down at this period of the year, having finished their appointed production on parts for present lines and not yet being tooled up for work on the new models to be announced later in the year. Iron and steel plants reported the lowest rate of lay-off, the percentage being only .11.

There was also released today a report from the President's Emergency Employment Committee, indicating that employment during the past week has remained nearly stationary.

Reports in the hands of the committee indicate that the New England and the Chicago territories have registered very satisfactory gains in employment. In the New England district the worsted, fine cotton goods and shoe industries are exceeding normal employment quotas

In Chicago a wave of buying from the corn belt has stimulated wholesale buying, and retail buying in consumption lines is also reported to be showing improvement, with the employment curve slightly on the upgrade.

Various other cities reported general improvement and slightly increased employment as follows: Buffalo, N. Y.; Wilmington, Del.; Norfolk, Va.; Dallas, Tex.; Minneapolis, San Francisco and Memphis, Tenn.

Cities reporting conditions as stationary are New York, Jacksonville, Fla.; Atlanta, Ga.; New Orleans, Kansas City, Denver, Seattle, Little Rock, Ark., and Portland, Ore.

Places from which reports of declines were received are as follows: Detroit, Philadelphia, Pittsburgh, Mobile, Ala.; Salt Lake City, Springfield, Mass., and Charleston, S. C.

The gloomiest report comes from Indianapolis, stating business and employment have reached the lowest ebb since the depression started.

STABILIZING GERMANY NEED SEEN BY MOONEY FOR REVIVING EXPORTS

NEW YORK, July 22.—James D. Mooney, head of the General Motors Export Corporation, returned yesterday from a business trip through England and the continent. Mr. Mooney told interviewers that our new tariff made it even more difficult to sell American cars in Europe than would have been the case if the international economic crisis were the only obstacle. He mentioned also that the high taxes on motor fuel, which most European governments have established, was another unfavorable factor.

Mr. Mooney said that, in spite of many difficulties, there had been a gradual but steady improvement in the economic condition of Europe, interrupted somewhat by the German situation. All hopes, he said, are now centered upon a revival of business in Germany through the stabilization of the financial situation. The proposed loan to Germany is not a cure, remarked Mr. Mooney, it is simply a tonic for a badly run-down economic patient.

IOWA LICENSES 17,073 OFF FIRST HALF 1931

Des Moines, Ia., July 22.—A decline of 17,073 licenses for 1931, as compared to 1930, is reported for the current six months by the Iowa State Motor Vehicle Department. While the drop is considerable, impressive gains were shown in two divisions, trucks and trailers, passenger cars and motorcycles representing the lines in which licensing decreased.

The figures for the first half of 1931 disclose that there were 645,390 passenger cars registered, 74,550 trucks, 1,434 motorcycles and 2,231 trailers. The 1930 first half year figures show 670,700 passenger cars, 67,373 trucks, 1,490 motorcycles and 1,106 trailers.

AUSTIN SALES IN OHIO AREA SHOWING GAINS

CLEVELAND, July 22.—**Inquiries for Austin cars, together with sales, have shown a marked increase during the past two weeks, says S. Nameth of the Fulton Motor Sales Company, 1828 Fulton road, Cleveland. The Fulton company is the exclusive representative of the Austin Company in the Cleveland district. Its sales territory covers three Ohio counties, Cuyahoga, in which Cleveland is located; Lorain, of which Lorain is the county seat, and Summit, in which Akron is located.**

The business coupe, says Mr. Nameth, is the most popular of the various Austin models. However, quite a number of delivery trucks have been sold recently. In Lakewood, O., Cleveland suburb, four Austin trucks recently were sold to the Dime Delivery Company, organized to deliver packages anywhere within the city limits for ten cents, with long hauls and large packages on a slightly higher price schedule. A similar company organized in Lorain also ordered several of the trucks.

"My greatest difficulty in selling these cars," says Mr. Nameth, "is not in convincing prospects of their value, especially at the low prices at which they now are offered. It is in convincing people that the Austin car still is being manufactured. Recent reports that the factory was shut down have been difficult to overcome."

TODAY

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Late News Flashes

New York, July 22.—In its current issue Iron Age says that July shipments from the steel plants have fallen off so little under June levels that hopefulness is gaining ground that a decided turn for the better will come in September. It is believed that present levels of output, which dropped 2 per cent. to 30 per cent. of capacity, will continue through August without material change.

* * *

Toledo, O., July 22.—The Owens-Illinois Glass Company has declared the regular quarterly dividends of 50 cents a share on the common stock and $1.50 on the preferred. H. F. Atherton was elected a director in place of F. H. McAdoo.

* * *

Detroit, July 22.—Registrations of new cars in Wayne county for the first twenty days of July show Plymouth leading with 723, Ford second, with 712, and Chevrolet third, with 591.

Automobile Radio Sales Showing Marked Gains

CLEVELAND, July 22.—**The automotive radio industry is growing rapidly despite a long-continued business depression, manufacturers of automobile radio here declare.**

About 5,000 Cleveland-owned automobiles are equipped with radio sets, it is estimated. Many radio stores and garages handle and install sets especially built for automobiles. There are six retailers in Cleveland giving their entire attention to installing and servicing radios in automobiles.

Radio manufacturers estimate that there are 100,000 in the entire country equipped with radios. This is thought to be nearly ten times as many as one year ago.

The growing popularity of the automobile radio suggests that automobile dealers and distributors soon will find the radio an important source of profits. Since 1929 automobile dealers have turned their attention to the development of service business. They have given it careful study and attention and have invested thousands of dollars in equipment. Service business, properly handled, yields attractive profits. In the automobile radio dealers now are beginning to see still another source of revenue, for tens of thousands of cars may be equipped with radios. Servicing of radios once installed should yield a large revenue.

Radios have been particularly popular with tourists. Tourist travel from northern Ohio is keeping pace with last year's volume, according to Meryl Q. Allyn, manager of the travel department of the Cleveland automobile club. At night tourists can pick up radio programs

(Continued on Page 2)

Automobile Radio Sales Showing Marked Gains

(Continued from Page 1)

almost every place they go in the United States or Canada, most sets receiving from a distance of 300 to 500 miles at night.

The Auto Radio Company here is selling an average of three radio sets a day, according to R. E. Weinbrore. Within six months, he predicts, sales will amount to at least ten a day.

The Cleveland Auto Craft Company now is selling 100 radios a month and expects to dispose of 500 a month during the late summer and early autumn. The Chicago factory which manufactures sets for the Cleveland company has an output of 3,000 a month.

The Atlas Radio Company, according to L. Balantcow, is selling ten times as many radios for automobile installation as last year.

United Motors has sold 600 automobile radio sets this year to date, says Manager S. J. Crellin. The Auto Radio Sales Company reports sales of about ten a week.

One of the handicaps to an even greater increase in the sales of automobile radios is the cost of a good receiving set. The Sterling Manufacturing Company, important manufacturer of radio equipments, predicts that when ways are found to manufacture sets at lower prices the industry will grow by leaps and bounds. Selling prices on automobile radios now range from $50 to $100, installed, with most sets selling around the higher figure. Because of the electrical devices on an automobile, radio sets have to be carefully shielded and grounded. This increases the cost on installation. The Sterling Company manufactured an automobile radio set last year but discontinued it because of its high cost.

There are about twenty different makes of automobile radios now on the market and others are being added nearly every month.

PLAN $300,000 BUS TERMINAL IN WORCESTER

Worcester, Mass., July 22.—Subject to approval by city council, the Union Bus Terminal Corporation is ready to construct and finance an underground bus terminal under Salem Square. Plans are being prepared by Alfred J. Smith, Worcester architect. Frank P. Ryan is attorney for the interests behind the proposition, which will cost between $300,000 and $500,000.

Although nothing has been revealed officially as to the personnel of the company, it is understood that Paul Babson, president of the Boston & Worcester Street Railway, and William H. Vanderbilt, president of Automotive Transportation Company and the Short Line System, would support the project.

According to present arrangments, the terminal would be used by all companies now operating in Salem Square. The terminal would be the property of the city, leased to the construction company until it had realized on its investment. Then it would revert to the city. The income would be from the companies using it on a rental basis.

Entrance to the terminal would be by ramp, sixteen feet wide and sixty to 100 feet long. Buses would be run on an underground turntable and then into stalls, arranged in a three-quarters circle.

EMBRY BACK IN FIELD OF LOUISVILLE SALES

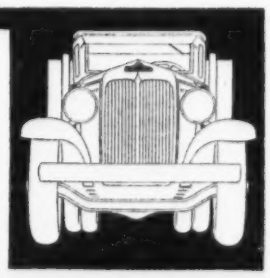
Louisville, Ky., July 22.—Wallace T. Embry, after being out of the automotive business for a couple of years, has re-entered, joining his old business partner, J. Rumsey Weir, Weir Motor Company, Chrysler dealer and distributor, as sales promotion manager.

Embry entered the automobile field here many years ago, and later with Weir formed the Embry-Weir Motor Company, which had Maxwell and other lines. Later the firm was split, Weir forming the Weir Motor Company, handling Maxwell exclusively, until Chrysler entered the field. Embry formed the Embry Motor Company, which handled Jordan, Marmon and other makes at various times.

N. J. TO SPEND $20,000,000 IN CROSSING ELIMINATION

Trenton, N. J., July 22.—Elimination of thirty-four grade crossings in New Jersey as has been ordered by the Board of Public Utility Commissioners since the grade crossing elimination act became operative almost two years ago, will cost nearly $20,000,000. Twenty-one of the eliminations ordered are in Elizabeth and eleven in Atlantic City. The Elizabeth eliminations will cost approximately $12,000,000 and the Atlantic City relocations $6,000,000.

REO's



SPECIAL OFFER

A new franchise in the volume truck field

Reo's new truck at $625 is Reo's answer to the universal question—"How can I make money *this year?*" Already the soundness of this answer has been overwhelmingly proved. From every corner of the country the returns are pouring in. Orders and more orders! Learn how easily you can finance Reo's Special Truck Franchise and get your share of today's most active volume-market. Mail the coupon!

$625

Four-cylinder $625, Six-cylinder $725
Chassis f. o. b. Lansing, Michigan
Dual Wheels Extra

REO MOTOR CAR COMPANY
LANSING — TORONTO

REO MOTOR CAR CO., Lansing, Michigan ADN23

Please send me at once—either by letter or through your representative—details of the Reo Special Truck Franchise.

Name _____

Address _____

(City) (State)

WILLYS GETS HARPER BACK; WILL DIRECT SALES FOR COMPANY

(Continued from Page 1)

a position in the industry second only to Ford and attained a prestige which made it one of the outstanding companies in America.

Few men in the automobile industry have had such a wide merchandising experience as Mr. Harper. In 1907 he joined the Ford Motor Company as advertising manager, subsequently organizing and operating the first export department for the Ford Company.

Mr. Harper joined Willys-Overland in 1911 as manager of the foreign department and made the first dealer arrangements for the Willys-Overland Company in foreign fields. He next served as assistant sales manager, and in 1915 was promoted to the position of general sales manager, which he held until 1918.

In 1918 he became the Willys-Overland distributor in Philadelphia and two years later general sales manager for Studebaker, from which position he retired to become Philadelphia distributor for Studebaker and remained as distributor for four years.

In 1927 the urge to get more intensive experience in other lines, which at that time seemed to require a higher degree of field merchandising effort, led Mr. Harper to join the Air-Way Electric Appliance Corporation, which has built up a large business throughout the United States in airway sanitary systems through house-to-house canvassing methods. He has been a distributor for this company since 1930, with offices in Philadelphia in a territory covering three states.

SERVING TRADE WELL HELD PROSPERITY KEY AT S. A. J. A. SESSION

(Continued from Page 1)

Neal G. Adair, managing editor of Motor Magazine, featured the first day session. "We believe that moderate revival in automobile business will get under way this fall and will gain momentum next year," he said. "It is probable that this year our retail sales in the United States will be about two million cars. The gradual revival will make them about two and a half million next year and in 1933, three million," he added.

"The jobbing end of automobile supply business has stood depression remarkably well because of essential nature of products that automotive jobbers sell," Adair continued, adding, "Through the Southern group there had been virtually no failures in automotive business."

Officers will be elected today.

GAS AND OIL CONTRACTS AWARDED IN JERSEY

Trenton, N. J., July 22.—Edward J. Quigley, state purchasing agent, today said contracts had been awarded for 1,050,000 gallons of gasoline for the use of the state cars during the fiscal year. The cost will be $84,600.

The Standard Oil Company was awarded a contract to furnish at service stations throughout the state 350,000 gallons of regular gasoline and 25,000 of special high test fuel. The regular gas will cost 9.2 cents and the special 12.2 cents a gallon. The company will supply 60,000 quarts of motor oil at 20 cents a quart.

Contracts for tank wagon deliveries to institutions, state garages and departments were awarded to the Crew Levick Company. The company will supply 650,000 gallons of regular gasoline at 7.2 cents a gallon and 25,000 gallons of high test fuel at 10.2 cents a gallon.

MANAGER APPOINTED

Atlanta, Ga., July 22.—Officials of the N. U. Rubber Company have announced the appointment of Sam Martin as manager of the Quick Tire Service Station here. He has been engaged in the tire business for the past twelve years.

SPARKS *from* DETROIT

Chevrolet's Plants

* * *

Wedding Bells

* * *

That Tarrytown Plant

Chris Sinsabaugh—Detroit Editor

WE Detroiters are so self-centered it is hard for us to see beyond the ends of our noses. When we say Chevrolet we think it is an institution almost wholly Detroit, not stopping to visualize the far-flung battlefront of the organization which has assumed such a leadership in our industry. Our local pride, however, took a tumble the other day when the real importance of Missouri in the Chevrolet picture was impressed on us by the official statement that:

"Today the Chevrolet plant at St. Louis, one of that city's largest factories, is the largest single plant in Chevrolet's domestic production setup of twenty-one plants. Today this plant turns out more cars than are being built at any of the Chevrolet's other eight assembly points, including Flint, and today Missouri outranks all states but Michigan in the size and importance of her Chevrolet factory developments. To date more than 1,500,000 Chevrolets have been built in Missouri. Today nearly 2,000,000 square feet of factory floor space in the combined Chevrolet and Fisher Body plants in the state are utilized for building or assembly of finished cars, and a wood working plant at St. Louis utilizes additional space for building all parts for certain Chevrolet bodies assembled throughout the world."

* * *

THAT'S just St. Louis. In Kansas City there are a Chevrolet assembly plant and a Fisher Body factory, furnishing cars to the west and north of that city, with each employing 1,000 men and where more than 200,000 cars have been assembled. This set-up was made in 1928 by President Knudsen. By the way, Kansas City and Atlanta opened wholesale offices in the same year, 1915, which were the first of the Chevrolet zones, which now number fifty-two in the United States.

From Kansas City completed cars go out to all or parts of Wyoming, Colorado, Utah, Montana, Nebraska, Kansas, Oklahoma, New Mexico, Idaho and Texas. From St. Louis shipments or driveaways are made to Nebraska, Illinois, Missouri, Arkansas, Tennessee, Mississippi, Louisiana, Texas and Oklahoma. The St. Louis plant, because of its size, also has been used at times to absorb the overflow from other plants taxed beyond their capacity, with the result that shipments from this point have at one time or another gone to practically every part of the globe.

* * *

WHAT'S the use of writing a column if you cannot take advantage of that fact to broadcast a la Walter Winchell. So here goes to tell you that the old wedding bells have been tuned up to ring August 14 when Ray Blackwell, advertising manager of De Soto, and Ruth Heinicke, our own George Slocum's private secretary, face the reverend gentleman and say "I do."

Being in the same office with the prospective bride, it was but natural that I should be the first newspaper man to learn the date.

* * *

THAT he was a former publisher of Cosmopiltan Magazine was the fact played up by the daily press in announcing the recent death of John Brisben Walker at the age of 83. Entirely overlooked was that Mr. Walker was one of the earliest pioneers in the automobile industry, probably the man with the greatest vision of any of those first days' builders as to the possibilities of the automobile. He was one who not only believed in the motor car, but who was so broadminded that he realized it was necessary to construct good roads if the industry was to go forward.

John Brisben Walker was one of those who thought steam would be the ultimate motive power of the automobile. He was one of the founders of the Automobile Company of America, along with A. L. Barber, but because of a conflict of names it was changed to the Locomobile Company of America. Barber and Walker soon split up, however, and the latter started the Mobile Company of America, locating his plant at Tarrytown, N. Y.

* * *

THAT old Tarrytown plant is now one of our landmarks. When steam lost out so did Walker, and the factory on the Hudson passed into other hands. Here it was that Maxwell-Briscoe started and became one of the leaders of the industry of a quarter of a century ago. With the passing of Maxwell-Briscoe the factory came into possession of Chevrolet, and today it is one of the big assembly plants of that giant organization.

Seeks Cut in Average Loss Per Car Yearly on Trades

New Jersey Nash Dealer Feels He Has the Used Car Problem Whipped; Explains Policies

By K. H. LANSING

J. E. EGGIE, senior partner in Eggie & Son, dealers in Nash automobiles, 1125 Haddon Ave., Camden, N. J., has found the present year an especially good one for the sale of used cars; in fact, the best the house has experienced. As long as they are a part of the business the Eggies like to sell used cars, and this is why, as explained by Mr. Eggie, Sr.:

"The dealer, in handling used cars, has some opportunity to show merchandising ability and initiative. This is generally not the case in his handling of new cars, in which the factory limits him and makes him follow out its ideas as far as possible, whether it is for his own good or not.

"I contend that if the dealer will accept in trade only two kinds of automobiles, namely, those he can immediately dispose of as junk to the junk dealer and used cars of late model in very good condition, and if he will ignore any and every method which the factory attempts to impose upon him to his detriment as a dealer and show merchandising ability of his own, he should get along very well in the automobile business.

"We follow out that policy. I have been in the automobile business for fourteen years, and I never had a 'used car problem' until the factory introduced its new models in October, which I contend is the wrong time of year. The 'problem' immediately appeared, but I feel now that I have it licked. I keep on hand at present not more than eight new models on an average, and I won't accept more. I was determined not to borrow any money this year at the bank, and I have adhered strictly to this plan, with the result that I don't owe a cent.

"We not only welcome the kind of exchange cars that we accept, but we periodically advertise for them in the newspapers, in which we say: 'We will buy for cash, trade or sell the customer's used car.' We positively will not accept in exchange any car in such condition that we would have to spend an undue amount of money to put it in resale condition.

"True, this takes a certain amount of firmness, but it pays in the end. Why, we let car owners who wish to sell us their used automobile, rather than buy a new one of us, walk out of here time and again when the exchange car is not the kind we want. And we shall continue to do so.

"We very thoroughly recondition such Nash cars as we accept in exchange and resell them with a guarantee, the same as a new car. Cars of other makes accepted, but not so thoroughly reconditioned, but are put in good running shape. Some of these, but not all of them, we sell with a guarantee.

"Our experience has taught us to know within $25 or so the selling price of a used car. We have five models, or prices of cars, in the Nash. On a car of each price, we undertake to limit, when making our appraisal, our loss on the trade-in to a certain specific amount, and we try to improve our average loss each year. For example, one year our average loss amounted to $75.15, and the year following we held it down to $66.46. We make up these figures when every one of the used cars traded in during that fiscal year has actually been sold, thereby eliminating all guesswork."

Eggie & Son ordinarily use a uniform size and type of advertisement for used cars in the Camden press. This is a boxed-in display in the classified columns, one column in width and two inches deep.

AUBURN DEALER OPENS

Raleigh, N. C., July 22.—Motor Service Company, Inc., newly appointed dealer for Auburn and Cord automobiles in Raleigh and eastern Carolina, held its formal opening a few days ago.

PERCENTAGE OF PROFIT AUBURN DEALER PLAN APPEALS TO SALESMEN

OPERATING a highly successful business on percentage of profit plan has eliminated the salary and commission basis for the Wittner Motor Company, Auburn dealer, with offices, salesrooms and service departments at 108-02 Merrick Boulevard, Jamaica, Long Island, N. Y., and with branches at 80-26 166th St., Jamaica, and 110-20 Jamaica Ave., Richmond Hill.

The concern finds this plan results in satisfied salesmen as well as a constantly growing business.

To a representative of the Automotive Daily News, Mr. Wittner unfolded some very interesting ideas which have been reflected in a rapidly growing and prosperous business.

Questioned as to his methods, Mr. Wittner replied:

"We find our plan of working our salesmen entirely on a percentage basis highly successful. Our salesmen put forth their best efforts and work wonders on this co-operative plan, and are happy and satisfied. As a matter of fact, we are turning away applicants for selling positions almost every day. Our salesmen seldom change. They like this plan much better than either salary or commission inducements."

The concern uses direct mail and local advertising to secure its selling contacts.

At present it is selling one new car a day. The sales to date are over 50 per cent. more than the entire year of 1930, Mr. Wittner says.

On a distribution of 50,000 circulars recently the firm secured more than 100 leads for prospective buyers, of whom a large proportion purchased cars.

At the new salesrooms located at 110-20 Jamaica Ave., Richmond Hill, the firm sold ten new cars in the first three weeks it was in operation. Since then the business there has been steadily improving.

The used car stock is not large. The firm takes in only good merchandise in trade-ins and moves its stock quickly.

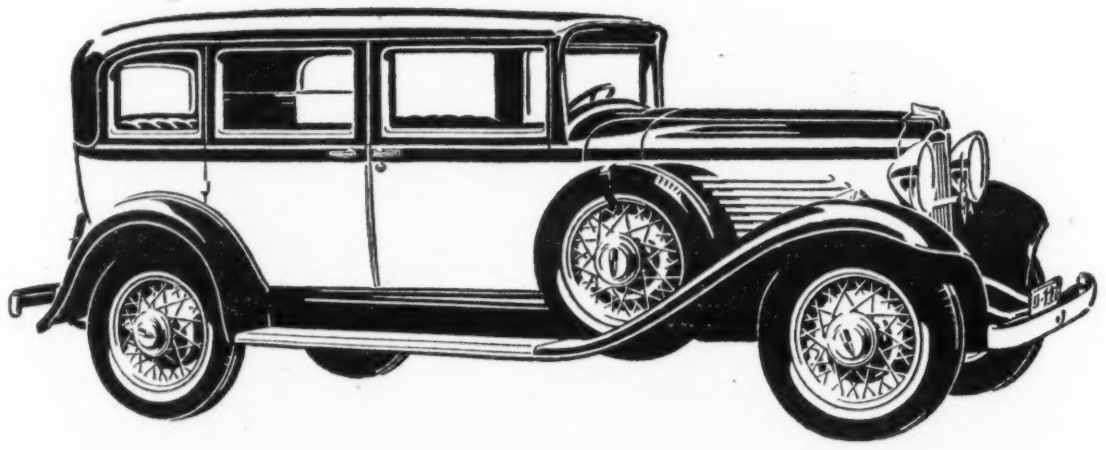
"We do not find the general business situation discouraging," continued Mr. Wittner. "There is a good demand for cars in our price field, and these buyers can be found by hard and steady work. On the whole, I feel that business is improving."

Wittner has been in business since 1920, and all indications point toward the present year, 1931, as one of the best the company has ever had.

NEW NASH DEALER ACTIVE IN NEW HAVEN TERRITORY

New Haven, Conn., July 22.—H. Goldman & Sons, 105 Goffe St., who took over the Nash franchise for New Haven April 22, had sold sixty-five new cars up to July 13, according to M. J. Goldman of the firm. Twenty-five units were sold in May and eighteen in June, with fifteen during the first two weeks in July.

For Volume in the last half of 1931



—the lowest priced WILLYS-KNIGHT

Rounding out the Willys-Knight line, we present at this time the new Model 95—the lowest priced Willys-Knight ever offered to the public.

$845

AND UP

f. o. b. Toledo, Ohio

Dealers everywhere welcome this new leader. They realize that it is a great car for producing volume sales—and volume is particularly vital to all dealers during the last half of this year.

This low priced Willys-Knight makes prospects of thousands of motorists who have always wanted to own a Knight-motored car, but who, until now, have felt that they could not afford to do so.

In addition to the exclusive Willys-Knight motor, this new car of course has all other features that you would expect to find in an up-to-date automobile. It has graceful lines, wire wheels and at extra cost, safety glass all around and free wheeling.

You will find that Willys policies and discount are most liberal.

Free Wheeling Available

Write or wire for particulars of this profit-building franchise. WILLYS-OVERLAND, INC., TOLEDO, OHIO

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

Published Every Day Except Sunday and Monday by
AUTOMOTIVE DAILY NEWS PUBLISHING CORPORATION,
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Member A. B. C.

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THURSDAY, JULY 23, 1931

ADVERTISING AND BUSINESS HEADQUARTERS

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George M. Slocum, Manager Detroit Bureau, 427-8 Fisher Building, Detroit, Mich., phone Empire 3500; Willard R. Cotton, Western Manager, 333 North Michigan Ave., Chicago, Ill., phone Central 5936; Metz B. Hayes, New England Manager, Little Building, Boston, Mass.; Blanchard Nichols & Coleman, American National Bank Building, San Francisco, Cal.; Lincoln Building, Los Angeles, Cal.; 1037 Henry Building, Seattle, Wash. Address ALL advertising and business correspondence to 350 Hudson St., New York City.

EDITORIAL DEPARTMENT

350 Hudson St., New York, N. Y. Telephone CA nal 6-1000
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Detroit Bureau, Chris Sinsabaugh, editor, 427-8 Fisher Building, Detroit, Mich. Telephone Empire 3500. Contributing editor, John C. Wetmore.

More Color Coming

FOR the past several years we have been going through an evolution of color in the automotive business, which has not been wholly lacking in its humorous sides. Also the philosopher and student of human psychology have had some opportunity for some cynical smiles.

When the lacquer type of automobile finishes came in, several years ago, they found probably 90 per cent. of all passenger cars bedecked in chaste black, with nickel trimmings. This was not choice, but necessity. Paint and varnish did not lend themselves to a multiplicity of color schemes. A few blues some somber greens and reds, a few grays and tans; these were about all the competition that black had.

Then came the lacquers, which could supply almost any shade or color that the heart could desire, without any extra effort or cost. The color-hungry public fell for this gay development almost unanimously. Black practically disappeared as a finish for passenger cars. Few of us will forget the raw colors and combinations that afflicted our eyes at the beginning of the color era. Car owners were so glad to get away from somber black and dark blue that they broke out into a rash of lavender, with orange trimmings, and malachite green with lemon touches. We heard George M. Graham, formerly of Willys-Overland, refer to one combination as "exploding orange, with ketchup scarlet on the side."

This phase passed more quickly than most fads do in this country. Its very violence wore out the vogue. Black gradually entered the picture again, dark blue, rich tones of green, but all these somber shades were lightened with appropriate contrasts in other colors.

The real color wave has not worn itself out. The human being likes brightness, even in the utility vehicle that gives him personal transportation. This fall we are going to see color introduced in steering wheels. It would be no surprise to see color used on the instrument board, on the levers that infest the front compartment. There may be a tendency toward somewhat gayer upholstery. The younger generation that we have talked so much about is beginning to make its importance felt in automobile buying and that younger generation is demanding color. We do not know whether all the oldsters are going to like it, but they are going to get it anyway.

The Way Out

SIR GEORGE PAISH, the well-known British economist, has just published a thought provoking book, which he calls "The Way to Recovery." Sir George has long been recognized as a prophet of gloom. He invariably believes that everything is going to the demnition bowwows and in his new book he sees the world in the worst difficulties it ever has faced. In this he will find not a few indorsers.

However, he makes one suggestion that is worth study and adoption with certain reserves. "All experience indeed proves," says Sir George, "that the road to prosperity runs in the direction of encouraging every nation to produce the commodities for which it is specially gifted and to exchange its products freely for those, whether raw or manufactured, which other nations are specially qualified to produce, and that just in proportion as this exchange takes place, trade expands and the standard of life throughout the world rises to higher levels. It is disregard of this principle and the effort which the nations are making again to become self-contained that is bringing them to an extremely perilous position."

This is, of course, the traditional British theory of free trade. Few nations will agree with that, but most countries are now ready to consider a sane adjustment of tariffs that will allow profit on each side and an extension of international ability to buy. The fact that we cannot follow Sir George Paish all the way does not make us any more admirers of Messrs. Hawley and Smoot, who perpetrated our present stultifying tariff law.

Differential Discussions

IN this column Automotive Daily News is glad to present the opinions of its readers on topics related directly to the automotive industry. Automotive Daily News, however, must disclaim responsibility for such opinions. All questions regarding merchandising, technical problems or other information pertaining to automotive industry will be answered without charge in this column.

Favors All Dealers Selling All Makes of Cars to Aid Industry

Editor Automotive Daily News:

With so many breaking hearts and breaking pocketbooks, not to mention the 15,000 to 17,000 already broken, it would seem a duty on my part to present to you an opinion that has always been foremost in my mind for the betterment of the automobile industry.

That something is wrong with the industry is undeniable, and waiting for better times is a false policy and one that will put thousands of dealers on the rocks.

Junking of used cars is an excellent idea, but it will not work out; nor will trade allowances given the dealer by the factory; nor will decreased prices. All of these measures are panic remedies—temporary—like the Hoover moratorium, and will cause more evil than good eventually.

Here is my solution; maybe it's just as futile as the many already suggested. But it's my idea and, until I'm convinced I'm wrong, I'll stick to it:

We all call ourselves automobile dealers, but are we? Aren't most of us just Ford dealers or Packard dealers or Franklin dealers and so on? When you go to a radio store you can buy almost any type of radio in the one store. You can buy any kind of tea in a grocery store, any kind of tire in a tire store, any kind of battery in an electrical service station. Why not any kind of car in an automobile showroom?

I can already hear the factories shouting the proposal down, but the factories cannot operate without dealers. So let's figure it out.

In the first case, there would be two or at the outside three dealers in each district. Let us pick on Albany, N. Y., as an example. General Motors cars would all be sold out of one showroom, the Chrysler group out of another, and the rest out of another. The Ford organization is capable of working out its own method.

Now, since there would be only three places where the people could buy automobiles, there would be only three chances of shopping their old car. This would improve the used car situation considerably, and the three organizations could come to an agreement on trading allowances without difficulty.

Then there would be considerably less overhead, less office staff, less salesmen, less mechanics, less everything, and much greater chance of turning what is at present a charitable institution into a sound and profitable business.

Immediately the question arises, will the factories agree to have other cars of the same class and price on the floor with their own?

What are they afraid of? If the other factory is producing better value for the money they'll sell more cars anyhow, but the one dealer will get a sale in either case, whether the customer decides on a Packard or a Pierce-Arrow. Besides, a prospect is more liable to buy an automobile when he is called upon to choose between two or three than he is when he has to go all over town looking at each one separately. After touring the town for hours, looking at different cars, hearing different sales talks, getting different allowances, it often happens that the prospect goes home and decides to keep his old car another year. And why? Because his mind is in a turmoil. He figures that, as one appraiser offered him $500 and the next $1,000, he might as well wait and see if another will come along and offer him $1,500. He's all confused. He doesn't know which salesman to believe and he's dead tired from the traveling he's done and the concentration that his brain has been called upon to exercise. Then for the next month or so he has twenty salesmen on his doorstep every day. How many times has one of your prospects asked you not to call at his home? And how many times have you ignored his request?

Finally, though actually the most important factor of all, is the protection offered all around. The factories are protected because a retail organization such as I suggest would have to have substantial cash resources, the buyer would be protected by having the fear of the unstability of the dealer removed from his mind when he considers purchasing certain automobiles, and the retail organization would be protected by the fact that, if one car proves to be unprofitable, he still has other makes which will help him balance his books on the right side.

There is no reason why this state of affairs could not be brought about in a very short while. It is only necessary for the various dealers in each territory to convene and combine under one roof to their mutual advantage, and the benefit of the entire automotive industry and its associate industries.

It's a big problem, but it's worth solving. How do you like the suggestion? A. C. DEVEREAUX.

Long Island, N. Y.

COMING EVENTS

SEPTEMBER

1- 3—**Cleveland, O.** Hotel Statler, Society of Automotive Engineers, twentieth annual aeronautical meeting in conjunction with National Air races.
8-17—**Utrecht, Holland.** Utrecht Fair, bus and truck show.
16-17—**Atlantic City, N. J.** National Petroleum Association, annual meeting, Hotel Traymore.
20-26—**Springfield, Mass.** Eastern States Exposition.
21-25—**Boston, Mass.** American Welding Society, meeting.
28-29—**Atlantic City, N. J.** National Association of Motor Bus Operators, fifth annual meeting, Hotel Ambassador.
26-Oct. 2—**Atlantic City, N. J.** American Electric Railway Association, annual meeting.

OCTOBER

1-11—**Paris, France.** International Automobile Salon.
2- 3—**Houston, Tex.** American Institute of Mining and Metallurgical Engineers, petroleum division meeting
12-16—**Chicago, Ill.** National Safety Council.
14-16—**Pittsburgh, Pa.** Society of Industrial Engineers, convention.
15-24—**London, England.** International Motor Exhibition, Olympia Hall.
22-28—**Prague, Czecho-Slovakia.** International Automobile Exposition.

Contemporary Comment

MORE and more persons are finding their way into the woods for their annual two weeks' trip. Thanks to the automobile, the great out-doors have become the very personal property of hundreds of thousands who were in former times comparatively restricted in their wanderings. It used to be that to get there was the objectc of a trip. Today, going is enough. However, with all the pleasures attributable to the nomadic automobile journey, it too has its hazards which, to be avoided, must be thoroughly appreciated.

In Pennsylvania alone during 1930 the automobile was credited with taking 2,424 lives, and a fair proportion of these fatalities occurred during the so-called travel-peak months; namely, June, July, August and September. It is therefore logical to assume that, of the number of highway deaths and casualties, many happened to the tourists while on pleasure bent.

It needs only to be suggested that too much speed, passing on hills, disregard of grade crossings, head-on collisions and side-swiping (all occasioned by careless, thoughtless and reckless driving) were the factors predominating in these accidents.

It would therefore appear that a little less fondness for the criminal disregard of one's own safety and of the others on the road must this year be exhibited if the automobile tourist fatalities and casualties during these summer months are to be definitely lessened.

Then again, there is the question of camps. Literally thousands of tourists are quite content with any camp. To arrive at the end of a day's journey and to find accommodations for tourists is enough. However, it can be safely said that cleanliness of surroundings, adequate sanitary facilities and proper supervision are as essential to health in camps as they are in the congested areas.

It will consequently pay every automobilist in Pennsylvania to be sure that the spot chosen for the night's stay, or longer, has been approved by the State Department of Health. The "Safe Drinking Water Here" sign is one of the main indications that this is the case.

Finally, a number of tourists are bound to pick up so-called vacation typhoid because of their habits of acquiring unpedigreed milk along their trip. It must be remembered that, unless the milk is certified or bears the stamp Grade A Raw Milk, it is risky to consume this product unless it has been protected by pasteurization. It follows that one should drink only the above varieties and not take any chances on the untreated product, no matter where found.—**Dr. Theodore B. Appel, Secretary of Health, Commonwealth of Pennsylvania, in United States Daily.**

Meet the Sales Chiefs

THE career of Paul G. Hoffman, vice-president in charge of sales of the Studebaker Corporation of America, is the history of an automobile salesman who made good. His entire background is founded on an early recognition of the growing importance of the automobile in everyday life.

Born in Chicago, young Hoffman attended the University of Chicago. In 1909 he went to work for the Halladay Motor Company, the manager of which was Charles Hayes, now president of the Chicago Motor Club. He was first employed as a demonstrator, later became shop foreman and then joined the sales force. When the Halladay factory got into financial difficulties, Hoffman decided to try his luck out West and journeyed to California.

In Los Angeles, in 1911, he joined the Studebaker branch as salesman. A year later he won first prize in a national sales contest and was awarded a trip to the South Bend factory as a guest of the corporation. It was here that Hoffman first made the contacts which were destined later to lead him to his present executive position.

In 1915 Hoffman was appointed retail manager in Los Angeles, and two years later manager of the Los Angeles wholesale branch. When war intervened in 1917, he donned the olive drab and served as first lieutenant of artillery.

Returning to civilian life in 1919, Hoffman purchased the Studebaker retail business in Los Angeles, and in the succeeding six years developed it to the point where sales were in excess of 4,000 cars a year. He still has an investment of $1,000,000 in this distributorship.

In 1925 Hoffman was called to South Bend by President A. R. Erskine and placed in charge of Studebaker's sales department. At the time, this departure from the conventional in the selection of a factory sales executive from the dealers' ranks aroused a tremendous amount of comment in the industry.

Some of Mr. Hoffman's most constructive service to the cause of motoring was rendered as chairman of the Los Angeles Traffic Commission. In that capacity, in 1924, he contributed to the organization of the major highways committee responsible for the drafting of the major highways plan, which was later adopted by the city of Los

Angeles as its official city plan. Los Angeles is now engaged on the first $100,000,000 unit of this $300,000,000 project.

Mr. Hoffman is a director of the National Planning Foundation and was personally responsible for the founding of the present Albert Russel Erskine Traffic Bureau at Harvard University. He is also a member of the visiting committee of the department of government. Last year he joined the ranks of authors with an interesting treatise on the successful merchandising of used cars. Mr. Hoffman resides in South Bend.

SYMONS AND RIPLEY RETURN TO FISK RUBBER

Chicopee Falls, Mass., July 22.—Hugh E. Symons and J. P. Ripley, who for a number of years were prominent in the sales organization of the Fisk Rubber Company, have both rejoined that company to engage in sales work. Mr. Symons, who for 20 years was district manager for Fisk at Detroit, has been appointed to the position of zone manager of the Detroit zone. Mr. Ripley, wh was district manager for Fisk in New York, has been appointed to a post on the general sales manager's staff.

HUEY CHEVROLET NOW

Columbia, S. C., July 22.—Secretary of State W. P. Blackwell announced Saturday that he had authorized the McFadden-Huey Chevrolet Company of Rock Hill to change its name to Huey Chevrolet Company.

NEW ENGLAND BOOSTERS PLAN FOR ANNUAL OUTING

Springfield, Mass., July 22.—Springfield and vicinity will be well represented at the annual outing of the Automotive Boosters' Club of New England in Pemberton next Monday. Many jobbers and their salesmen have been invited and any dealer or salesman having to do with the merchandising of cars, trucks, tires or accessories is privileged to attend. Dan Tannan is chairman of the general committee, which is divided into various smaller groups. W. T. Maybury is president of the organization. Arrangements have been made so that members from other New England cities may go to Boston for weekend and be on hand early Monday morning to attend the outing.

BLACK & DECKER CAPTURE BALTIMORE SAFETY HONORS

Baltimore, July 22.—During the past six months seventy-nine manufacturing plants in and around this city have been competing in the safety campaign staged by the Baltimore Safety Council for the purpose of stimulating greater interest in the elimination of lost-time accidents. The winner of the bronze trophy award is the Black & Decker Manufacturing Compauy at Towson. This company during the period of the campaign did not have a single lost-time accident.

CURRENT PRICES OF PASSENGER CAR MODELS

AUBURN—8-98. 127 W. B.
Standard Models
2-dr. Brougham..945 | Con. Cabriolet..1.045
4-dr. Full Sedan.995 | Con. Phae. Sed..1,145
B Man's Coupe.995

AUBURN—8-98 A. 127 W. B.
Custom Models
5 4-dr. Sedan...1,195 | Cabriolet (R.S).1,245
B. Man's Coupe.1,195 | 5 Con. Pha. Sed.1.345
5 2-dr. Brough.1,145

AUSTIN—4 cyl. 75 W. B.
Business Coupe..330 | De Luxe Coupe ..525
Standard Coupe.395 | 2 Cabriolet 550
Runabout 395

BUICK—8-50. 114 W. B.
2 Bus. Coupe...1,025 | 5 Phaeton 1.055
5 2-dr Sedan...1,035 | 4 Spt Coupe....1,055
4 Spt. Roadster.1,055 | 5 4-dr Sedan....1,095
4 Conv. Coupe ..1,095

BUICK—8-60. 118 W. B.
2 Bus. Coupe...1,285 | 5 Phaeton 1,335
4 Spt. Coupe...1,325 | Spt Roadster....1,335
5 4-dr. Sedan...1,355

BUICK—8-80. 124 W. B.
4-Coupe .....1,535 | 5 4-dr. Sedan...1,565

BUICK—8-90. 132 W. B.
4 Spt. Roadster.1,610 | 5 4-dr. Sedan....1,785
7 Touring .....1,620 | 4 Conv. Coupe ..1,785
2 Spt. Coupe...1,720 | 7 4-dr. Sedan....1,935
5 Coupe .....1,765 | 7 Lim. Sedan....2,035

CADILLAC—V-8. Fisher Custom. 134 W B.
2 Coupe .....2,695 | 2 Con. Coupe....2,945
5 Coupe .....2,795 | 7 Sedan 2,945
5 Sedan .....2,795 | 5 A. W. Phaeton..3,795
5 Twn Sedan..2,845 | 7 Imp. Sedan....3,095
2 Roadster .....2,845 | 7 Touring (Fleet-
5 Phaeton .....2,945 | wood) 3,195

CADILLAC—V-12. 140 W. B.
2 Coupe .....3,795 | 7 Sedan (143 W. B.).....4,195
5 Coupe 3,895
5 Sedan .....3,895 | 7 Touring 4,295
Roadster .....3,945 | 7 Imperial Sedan
5 Twn Sedan..3,945 | (143 W. B.)...4,345
Phaeton .....4,045 | A. W. Phaeton..4,895
Con. Coupe 4,045

CADILLAC—V-16. 148 W. B.
Fleetwood Custom.
2 Roadster .....5,350 | 2 Coupe 6,850
A. W. Phaeton..5,750 | 2 Con. Coupe ...6,900
2 Coupe .....5,800 | 5 Club Sedan ...6,950
5 Coupe .....5,950 | 5 Sedan 6,950
5 Club Sedan....5,950 | 5 Sedan Cabrio..7,125
5 Sedan .....5,950 | 7 Sedan 7,225
5 Sedan Cabrio.6,125 | 5 Imperial 7,300
7 Sedan .....6,225 | 5 Imp. Cabriolet.7,350
5 Imperial .....6,300 | 7 Imp. Sedan....7,525
5 Imp. Cabrio...6,350 | Town Cabriolet
5 Phaeton .....6,500 | (Opera seats) .8,750
7 Imp. Sedan...6,525 | Town Cabriolet
Town Cabriolet | (quarter win-
(opera seats)..6,525 | dows) 8,750
Town Cabriolet, | Town Cabriolet
(q'rter win.).6,525 | (leather
Town Cabriolet, | quarters) 8,750
(full leather).6,525 | Lim. Brougham.8,750
Lim. Brough'm.6,525 | Town Brougham.9,200
Town Brougham.9,700

CHEVROLET—6-Cyl. 109 W. B.
2 Roadster .....475 | 2-4 Sport Coupe
2-4 Sp. Roadster.495 | (5 windows)....575
5 Phaeton .....510 | 5 Coupe 595
2 Coupe (3 win.)..535 | 5 Sedan 635
2 Coupe (5 win.)..545 | 5 Special Sedan...650
5 Coach .....545 | Con. Cabriolet ...615
Lan. Phaeton ...650

CHRYSLER—"6." 6-cyl. *175⅞ O. A.
2 Business Coupe | 5 Sedan 895
(5 wire wheels) .865 | 5 Phaeton 915
2-4 Coupe (RS) (5 | 2-4 Con. Coupe
wire wheels)...835 | (RS) 935
2-4 Coupe (RS) (4
wood wheels)..885

CHRYSLER—8-cyl. *186½ O. A.
2-4 Roadster ...1,595 | 5 Royal Sedan
2-4 Royal Coupe | (Special) 1,695
(Standard) ..1,495 | 2-4 Sport Roadster
5 Royal Sedan | (6 wire wheels) 1,595
(Standard) ..1,525 | 2-4 Con. Coupe.
2-4 Royal Coupe | 5 Phaeton 1,970
(Special) 1,535

CHRYSLER—8 cyl. *187½ O. A.
De Luxe Models
2 Coupe (R.S.)..1525 | 4 Con. Coupe
4 Roadster (RS) 1545 | (R. S.).....1595
5 4-dr. Sedan ..1565 | 5 Phaeton 1970

CHRYSLER—Imperial. 8-cyl. 211 O. A.
5 Sedan .....2,745 | 7 Sedan Lim....3,145
5 Sedan (Cl.C) .2,845 | 2-4 Cus. Coupe...3,150
7 Sedan 2,945

CORD—8-cyl. 137½ W. B.
Sedan .....2,395 | Cabriolet 2,495
Brougham .....2,395 | Phaeton Sedan..2,595

DE SOTO—Six. *169½ O. A.
5-2 dr. Sedan ..695 | 5 Touring 795
2 Stand. Coupe ..740 | 2-4 Roadster 790
2-4 Coupe (RS) .775 | 2-4 Con. Coupe
5-4-dr. Sedan....775 | (R. S.) 825
5 De L. Sedan....825

DE SOTO—8-cyl. *177 O. A.
2 Business Coupe 965 | 5 Touring 1.035
2-4 Road. (RS)..995 | 5 De L. Sedan...1,065
2-4De L Coupe | 2-4 Con. Coupe
(RS) .....993 | (RS) 1,075
5 4-Dr. Sedan....995
Above listing can also be had in De Luxe models at same price.

DE VAUX—6 cyl. 113 W. B.
Phaeton .....595 | Standard Sedan
Standard Coupe | (4 wood wheels,
(4 wood wheels | spare rim) 695
spare rim).....625 | Special Sedan
Business Coupe | (5 wire wheels,
(5 wire wheels, | spare mounted
one in right | in rear) 705
fender well)....645 | Custom Coupe....795
Sport Coupe .....675 | Custom Sedan ...795

DODGE—6-cyl. 114½ W. B.
2 Coupe (5 wire | 2-4 Coupe (R. S.)
wheels, R. M.)..815 | (5 wire wheels,
2 Coupe (4 wood | 1 F. W. 850
wheels) .....815 | 2 Coupe (5 wire
2 Coupe (5 wire | wheels, 2 F. W.)850
wheels, 1 F.W..830 | 5 Sedan (5 wire
2-4 Coupe (R. S.) | wheels, 1 F. W.)860
(5 wire wheels, | 5 Sedan (4 wood
R. M.) .....835 | wheels, 1 F. W.)860
2-4 Coupe (R. S.) | 5 Phaeton (4 wood
(4 wood wheels, | wheels) 865
R. M.) .....835 | 2-4 Coupe (6 wire
5 Sedan (5 wire | wheels, 2 F. W.)
wheels, R. M.).845 | (R.S.) 870
5 Sedan (4 wood | 5 Sedan (4 wood
wheels, R. M.).845 | wheels, 2 F. W.)875
5 Sedan (6 wire
wheels, 2 F. W.)880

DODGE— 8-cyl. 118¼ W. B.
2-4 Coupe (R. S.) | 5 Sedan (4 wood
(5 wire wheels, | wheels, R. M.) 1,135
R. M.) .....1,095 | 5 Sedan (5 wire
2 Coupe (5 wire | wheels, 1
wheels, R. M.)1,095 | F. W.) 1,150
2-4 Coupe (4 wood | 5 Sedan (5 wood
wheels) .....1095 | wheels, 2
2-4 Coupe (6 wire | F. W.) 1,165
wheels, 2 | 5 Sedan (6 wire
F. W.).....1,130 | wheels, 2
5 Sedan 5 wire | F. W.) 1,170
wheels, (R.M.)1,135

DURANT—619 6-cyl. 109 W. B.
5 4-dr. Sedan... 695

DURANT—610 4-cyl. 112 W. B.
Business Coupe | Coupe (R. S.)
(wood wheels)..735 | (wire wheels)...770
Business Coupe | Sedan (wood
(wire wheels)...750 | wheels) 765
Coupe (R. S.) | Sedan (wire
(wood wheels)..755 | wheels) 780

DURANT—612 6 cyl. 112 W. B.
Business Coupe | Sedan (5 wire
(wood wheels).760 | wheels 810
Business Coupe | 5 Sps. Coupe (R.S.)
(wire wheels) .775 | (5 wire wheels).830
Coupe (R. S.) | 5 Sps. Road. (R.S.)
(wood wheels).780 | (6 wire wheels).845
Coupe (R. S.) | Sedan 6 wire
(wire wheels)..795 | wheels) 845
Sedan (wood
wheels) 795

DURANT—614 6 cyl. 112 W. B.
De L. Coupe | De L. Sedan
6 dem. wood | (6 dem. wood
wheels) .....965 | wheels 995
De L. Coupe | De L. Sedan
(6 dem. wire | (6 dem. wire
wheels) .....965 | wheels) 995

ESSEX—6-cyl. 113 W. B.
2 Coupe .....595 | 5 Town Sedan ..735
5 Coach .....595 | 5 Touring Sedan. 775
4 Coupe (R.S.)... 645 | Spec. Sedan 855
5 Stand. Sedan...695 | 7 Sedan (119 w. b.)895
4 Sport Roadster 725

FORD—Model A. 4-cyl. 103½ W. B.
2 Roadster ..... 430 | 5 De L. Phaeton 580
5 Phaeton ..... 435 | 5 Standard Sedan
2 De L. Roadster 475 | (3 windows)... 590
5 Tudor Sedan.. 490 | 4 Cabriolet 595
2 Coupe ..... 490 | 5-4-dr. De Luxe
4 Sport Coupe.. 500 | Sedan (2 win.) 630
4 De L. Coupe.. 525 | 5 Town Sedan... 630
4 Victoria..... 580 | 5 Con Sedan..... 640

FRANKLIN—Transcontinent. 6-cyl. 125 WB.
5 Sedan.....2,295 | Vic Brougham..2,395
Coupe .....2,345 | Pursuit 2,495
Con. Coupe....2,395 | Town Sedan....2,425

FRANKLIN—Transcontinent. 6-cyl. 132 WB.
Roadster (6 wire | 7 Sedan 2,475
wheels) .....2,345 | Sport Salon....2,595
5 Special Sedan..2395 | Spec. Limousine.2,725

FRANKLIN—De Luxe. 6-cyl. 132 W. B.
Coupe .....2645 | Speedster (5 wire
5 Sedan.....2,695 | wheels) 2,845
5 Pirate Tour...2,695 | 7 Sedan 2,895
7 Pirate Phaet.2,695 | Con. Speedster..2,995
Club Sedan.....2,745 | 7 Limousine.....2,995
Con. Coupe....2,765 | Town Berline (6
Vic. Brougham.2,795 | wire wheels)...4,195

GRAHAM—Prosperity. 6 cyl. 113 W. B.
Coupe ..... 785 | Sedan 825
Town Sedan .....795 | Coupe (R.S.) ...825

GRAHAM—Standard. 6 cyl. 115 W. B.
Coupe .....945 | Coupe (R.S.) 983
Roadster (R.S.)..945 | Sedan 995

GRAHAM—Special. 6 cyl. 115 W. B.
Coupe .....985 | Coupe (R.S.) ...1025
Roadster (R.S.)..935 | Sedan 1035
Town Sedan ...1015

GRAHAM—Special. 8 cyl. 120 W. B.
Coupe .....1185 | Sport Sedan 1235
Coupe (R.S.) ...1225 | Sedan 1285

Graham—Custom. 8 cyl. 134 W. B.
Sedan .....1895 | Limousine 2145
7 Sedan 1945

HUDSON—8-cyl. 119 W. B.
2 Coupe .....875 | 5 Town Sedan....945
5 Coach .....895 | 5 Stand. Sedan...995
4 Coupe (RS) ..925 | Sport Roadster...995

HUDSON—8-cyl. 126 W. B.
5 Tour. Sedan..1,145 | 5 DeL. Brougham.1,375
5 Brougham ....1,195 | 5 Club Sedan ..1,445
7 Fam. Sedan..1,195

HUPMOBILE—Century 6. 114 W. B.
5 Sedan .....995 | Cabriolet (RS)...1,050
Com. Coupe.....995 | 5 Phaeton 1,050
2 Coupe (R. S.)..995 | Roadster (RS)..1,075

HUPMOBILE—Century 8. 118 W. B.
5 Sedan .....1,295 | 2 Cabriolet (RS) .1,350
2 Coupe (RS)...1,295 | 5 Phaeton 1,350
2 Com. Coupe...1,295 | 2 Roadster (RS)..1,375

HUPMOBILE—Series C. 121 W. B.
5 Sedan .....1,595 | Victoria Coupe..1,615
2 Coupe (RS)...1,595 | 7 Spt. Phaeton..1,685
2 Cabriolet (RS).1,595 | 5 Town Sedan...1,705
4 Coupe 1,615

HUPMOBILE—Series R. 125 W. B.
5 Sedan .....1,895 | Victoria Coupe..1,915
2 Coupe (RS)...1,895 | 7 Spt. Phaeton..2,005
2 Cabriolet (RS).1,895 | 5 Town Sedan..2,005
4 Coupe 1,915

HUPMOBILE—Series U. 137 W. B.
7 Sedan .....2,295 | Sedan Limou....2,445
Victoria Coupe.2,295

LA SALLE—8-cyl. 134 W. B.
Fisher Custom
2 Coupe .....2,195 | 5 Town Sedan...2,345
5 Sedan .....2,295 | 7 Sedan 2,475
2 Con. Coupe ..2,295 | 7 Imp. Sedan ...2,595
5 Coupe 2,295

LA SALLE—8-cyl. 134 W. B.
Fleetwood Custom
2 Roadster .....2,245 | 5 Sedanette 3,245
7 Touring .....2,345 | 5 A. W. Phaeton.3,245
5 Sedan Cabrio.3,245

LINCOLN—8-cyl. 145 W. B.
Standard Models
4 Sport Phaeton .....4,400 | Town Sedan (3 windows)...4,600
7 Sport Touring..4,400 | 4 Sport Phaeton T.C.) 4,600
5 Coupe .....4,600 | 4 Con. Roadster.4,700
5 Town Sedan (2 windows)..4,600 | 5 Sedan 4,700
7 Sedan 4,900
7 Limousine 5,100

LINCOLN—8 cyl. 145 W. B.
Custom Models
2 Coupe (Judkins).....5,200 | Con. Sedan (Dietrich).....6,800
4 Berline (2 win.) (Judkins).....5,800 | A. W. Cabriolet N.C.(LeBaron).7,100
Berline (3 win.) (Judkins).....5,800 | A. W. Brougham (Brunn) 7,200
Limousine (Willoughby)..6,100 | A. W. Cabriolet S.C. (LeBaron).7,300
Con. Phaeton (Derham).....6,200 | A. W. Cabriolet (Brunn).....7,400
Con. Coupe (Dietrich).....6,400 | Panel Brougham (Willoughby)...7,400

MARMON—70. 112¾ W. B.
2 Stand. Coupe...950 | 4 Vic. Coupe 995
5 Sedan .....995 | 2 Con. Coupe ...1,045

MARMON—88. 130-136 W. B.
5 Sedan .....1,895 | 2 Con. Coupe ...2,395
5 Sedan .....2,220 | 7 Sedan 2,495
2 Stand. Coupe..2,275 | 7 Limousine 2,595
5 Club Sedan ...2,345

MARMON—16-cyl. 145 W. B.
5 Sedan .....4,775 | 2 Con. Coupe ...4,875
2 Coupe .....4,795 | 7 Sedan 4,975
5 Cl. Cp. Sedan.4,845 | 5 Con. Sedan ...4,995
5 Victoria .....4,845 | 7 Limousine 5,075

NASH 960— 6-cyl. 114¼ W. B.
Coupe .....795 | 4-dr. Sedan 845
2-dr. Sedan .....795 | Touring 895
Coupe (RS) 825

(Recent price changes in bold face)

NASH—970. 8-cyl. . 116¼ W. B.
Coupe .....945 | 4-dr. Sedan 995
4-dr. Spec. Sedan.955 | 4 Con. Sedan....1,075
Coupe (RS) 975

NASH—980. 8-cyl. 121 W. B.
Coupe .....1.245 | 4 Con. Sedan....1,325
Coupe (RS).....1,285 | 4-dr. Town Sed..1,375
4-dr. Sedan 1,295

NASH—990. 8-cyl. 133 W. B.
4-dr. Sedan (124 W. B.).....1,565 | Victoria 1.765
7 Touring .....1,595 | 5 Sedan 1825
Cabriolet .....1,695 | 7 Sedan 1.925
Coupe (RS).....1,745 | 7 Limousine 2,025

****OAKLAND—8-cyl. 117 W. B.**
Coupe .....1,004 | Con. Coupe 1,104
2-dr. Sedan.....1,004 | 4-dr. Sedan 1,104
Sport Coupe.....1,084 | Custom Sedan...1,164

OLDSMOBILE—6-cyl. 113½ W. B.
Standard Models
2-dr. Sedan .....845 | 4-dr. Sedan 925
Business Coupe...845 | Con. Roadster....935
Sport Coupe ....895 | Patrician Sedan..960

OLDSMOBILE—6-cyl. 113½ W. B.
De Luxe Models
2-dr. Sedan.....910 | 4-dr. Sedan 990
Business Coupe...910 | Con. Roadster...1,000
Sport Coupe ....960 | Patrician Sedan.1,025

PACKARD—8-cyl. 129½ W. B.
5 Sedan 2,485

PACKARD—8 cyl. 136½ W. B.
5 Phaeton .....2,650 | 5 Coupe 2,795
2-4 Coupe Roadster ....2,650 | 7 Sedan 2,885
2 Coupe .....2,675 | 5 Spt Phaeton...2,950
5 Sedan .....2,685 | 7 Sedan Limousine 2,985
7 Touring .....2,775 | 5 Conv Victoria..3,395
5 Club Sedan ..2,775 | 5 Conv. sedan...3,445

PACKARD— 8-cyl. 112¼ W. B.
5 Phaeton .....3,690 | 5 Coupe 3,850
2 Coupe .....3,725 | 5 Club Sedan ...3,890
2-4 Coupe Roadster .....3,750 | 5 Coupe 3,890
7 Touring .....3,795 | 5 Conv. Victoria.4,495
5 Sedan .....3,845 | 5 Conv. sedan....4,550

PACKARD— 8-cyl. 117¼ W. B.
7 Sedan .....4,150 | 7 Sedan Lim.....4,385

PEERLESS—Standard 8. 118 W. B.
5 Sedan .....1,495 | 5 Brougham 1,545
2 Coupe (RS)...1,495 | 2 Cabriolet R.S..1,595
5 Club Sedan ...1,545

PEERLESS—Master 8. 125 W. B.
5 Sedan .....1,995 | 5 Brougham 2,045
2 Coupe (RS) ..1,995 | 2 Cabriolet 2,095
5 Club Sedan...2,045

PEERLESS—8-cyl. 125 W. B.
De Luxe Master
5 Sedan .....2,320 | Brougham 2,370
2 Coupe .....2,320 | Cabriolet 2,420
Club Sedan 2,370

PEERLESS—Custom 8. 138 W. B.
2 Coupe (RS)...2,795 | 5 Brougham 2,845
5 Sedan .....2,795 | 7 Sedan 2,945
5 Club Sedan...2,845 | 7 Limousine 3,145

PIERCE-ARROW—43. 8-cyl. 134 W. B.
2-4 Coupe (RS).2,685 | 2-4 Sport Roadster
5 Sport Tourer.2,895 | (RS) 2,895

PIERCE-ARROW—43. 8-cyl. 137 W. B.
5 Sedan .....2,685 | 7 En. Dr. Limou.3,145
5 Club Sedan...2,835 | 5 Con. Sedan....3,650
7 Sedan 2,995

PIERCE-ARROW—42. 8-cyl. 142 W. B.
5 Tourer .....3,450 | 4 Spt. Phaeton..3,750
2-4 Spt. Roadster (RS) .....3,450 | 5 Club Sedan...3,745
7 Sedan 3,825
2-4 Con. Coupe (RS) .....3,650 | 5 Club Berline..3,945
7 En. Dr. Limou.3,995
5 Sedan 3,695

PIERCE-ARROW—41. 8 cyl. 147 W. B.
7 Spt. Tourer...4275 | 7 Sedan 4785
2-4 Con. Coupe (R.S.) .....4275 | 7 En. Dr. Limou..4985

PIERCE-ARROW—41. 8 cyl. 147 W. B.
Le Baron Custom Group
2-4 Coupe (RS).5100 | Formal Town
5 Coupe Victoria.5100 | Brougham 6250
5 Con. Sedan ..5200 | Formal Town
5 Spt. Sedan ...5375 | Car. 6250
7 En. Dr. Lim..5975 | Formal Town Landaulet 6400

PLYMOUTH—4-cyl. 170 O. A.
2 Bus. Roadster...535 | 5 Phaeton 595
2 Bus. Coupe.....565 | 2 Coupe (RS) 610
5 2-dr Sedan ....575 | 4-dr Sedan 635
4 Roadster (R.S.).595 | 4 Con Coupe 645

****PONTIAC—6 cyl. 112 W. B.**
2-dr Sedan .....779 | Con. Coupe 849
Coupe .....779 | 4-dr. Sedan 849
Sport Coupe ....819 | Custom Sedan ...899

REO—6-21. 6-cyl. 121 W. B.
5 Sedan 1295

REO—8-21. 8-cyl. 121 W. B.
5 Sedan 1,395

REO ROYALE—8 cyl. 131 W. B.
Sedan Victoria..2,145 | Coupe 2,145

REO ROYALE—8 cyl. 135 W. B.
Sedan .....2,745 | Coupe 2,745
Con. Coupe 2995

STUDEBAKER—Six. 114 W. B.
Roadster .....895 | Tourer 895
2 Bus. Coupe.....845 | Regal Tourer.....970
5 4-dr. Sedan.....895 | 5 Regal Sedan
4 Coupe (RS)....895 | (6 wire wheels) .970

STUDEBAKER—Commander 8-70. 121 W. B.
4 Coupe .....1,585 | 5 Brougham
5 Sedan .....1.585 | (Cloth) 1685
4 Victoria .....1,585 | 5 Brougham
5 Regal Sedan...1685 | (Mohair) 1685

STUDEBAKER—Dictator. 8-cyl. 114 W. B.
2 Coupe .....1,095 | 5 Sedan 1.150
4 Coupe .....1,150 | 5 Regal Sedan...1225

STUDEBAKER—President 8-80. 130 W. B.
5 Sedan .....1,850 | 5 State Sedan
2 Coupe .....1,850 | (Mohair) 1950
4 State Roadster.1900 | 5 State Sedan
4 State Coupe....1950 | (Cloth) 1950

STUDEBAKER—President 8-90. 136 W. B.
7 Tourer .....1.850 | State Victoria....2250
7-State Tourer...2950 | 7 State Sedan
7 Sedan .....2,150 | (Mohair) 2250
5 Brougham | 7 State sedan
(Mohair) ....2,295 | (Cloth) 2250
5 Brougham | 7-Limousine 2550
(Cloth) 2,295

STUTZ—LA 6-cyl. 123½ W. B.
5 Coupe .....1,995 | Cab. Coupe.....2,445
5 Sedan .....2,245 | 2 Speedster 2,585
2 Coupe .....2,245 | 4 Speedster 2,585
Club Sedan ....2,345 | 4 Speedster (TC) .2,785

STUTZ—MA. 8-cyl. 131½ W. B.
5 Coupe .....2,690 | 2 Speedster 3,495
2 Coupe .....2,995 | 4 Speedster 3,495
5 Sedan .....3,195 | Tor. Speedster ..3,595
Club Sedan.....3,295 | 4 Speedster (TC) 3,795
Cab. Coupe 3,345

STUTZ—MB. 8 cyl. Custom. 145 W. B.
7 Speedster ....3,595 | 7 Limousine 3,995
5 Sedan .....3,695 | Cab. Coupe 3,995
7 Sedan .....3,895 | 5 Con. Sedan ...4,395

STUTZ—MB. 8-cyl. Salon. 145 W. B.
5 Sedan | 7 Sedan Limousine
(Le Baron)...4,795 | (Le Baron)....5,195
6 Brougham | 5 Trans. Cabriolet
(Le Baron)...4,995 | (Le Baron)....5,610
6 Sedan | 7 Trans. Town Car
(Le Baron)...4,995 | (Le Baron)....5,700
6 Bro. Limousine | 7 Trans. Town Car
(Le Baron)...5,195 | (Fleetwood)....7,495
6 Sed Limousine
(Le Baron)...5,195

STUTZ—MA. 8 cyl. 134½ W. B.
Chateau Series Weymann.
4 Longchamps ..4,345 | 5 Versailles 4,345

STUTZ—MB. 8-cyl. 145 W. B.
Chateau Series Weymann.
5 Chaumont ...4,745 | 5 Monte Carlo ...4,895

WILLYS—6-97. 6-cyl. 110 W. B.
2 Roadster .....495 | 5 Club Sedan 625
5 Touring .....545 | 5 Sedan 675
2 Coupe .....565 | 4 De L Spt.
5 2-dr. Coach.. 595 | Roadster 675
4 Coupe .....595 | De L. Touring....725

WILLYS—6-98-D. 6-cyl. 113 W. B.
5 Standard Sedan.795 | 5 Sedan (De L)...850
4 Vic. Coupe(DeL)850

WILLYS—8-80-D. 8-cyl. 121 W. B.
5 Sedan .....995 | 4 Victoria Coupe
5 Sedan (De L).1,095 | (De Luxe) 1.095
Custom Sedan ...1,295

WILLYS KNIGHT—6-95. 113 W. B.
Coach .....845 | 5 Sedan 875
2 Coupe .....845 | Victoria Coupe
5 Win. Coach.....875 | (De L.).....895

WILLYS-KNIGHT—66-D. 6-cyl. 121 W. B.
5 Sedan .....1,095 | 4 Victoria Coupe
5 Sedan (DeL)...1,195 | (De Luxe) 1.195
Custom Sedan...1,395

*Over all length of chassis instead of wheel base.
**As delivered prices only are quoted, they vary in different sections of the country and the Oakland-Pontiac prices given above are for New York city only.

Assembly of American Cars in Argentina Aids In Nation's Motorization

MANY interesting facts regarding the growing custom of partially or wholly assembling motor vehicles in the Argentine are indicated in a recent report from the Department of Commerce by Thomas C. Ballagh, assistant trade commissioner at Buenos Aires. The report is as follows:

Labels reading "Made in U. S. A., but assembled in Argentina," could be attached to four out of every five cars and to three out of every four trucks sold in that South American republic. This proportion of the 87,000 cars and trucks that Argentina imported in 1929 was received in either a semi or completely knocked-down condition, principally the latter. Although the 1930 depression temporarily reduced imports to 47,000 units, the proportion assembled locally was the same if not slightly higher. About 97 per cent. of the cars and 96 per cent. of the trucks imported are American.

Assembly of automobiles in Argentina began as far back as 1916, and is now carried on by two large branch plants of American car manufacturers and five Argentine distributors of low and medium price cars. The branch factories each employ about 1,000 men at present; more in normal times, and now assemble up to forty or sixty units a day, but are each equipped to turn out 100 or more daily. This is the complete assembly, including the building of automobile bodies from their component parts, all of which are imported from the United States. The motor alone is received in assembled form. The Argentine distributors referred to above assemble their cars only partially, as the chassis are imported knocked down, but the bodies are brought in completely finished and ready to place on the chassis.

The growth of the local assembly work has followed closely the increasing motorization of Argentina. In total number of automotive vehicles in circulation Argentina now ranks seventh among the nations of the world, with an estimated 366,000 units, which is more than in all the rest of South America put together. (As of January 1, 1931, there were estimated to be 294,764 cars, 68,760 trucks and 2,800 buses in Argentina.)

The use of automotive vehicles has increased in spite of several handicaps. Less than 2 per cent. of the roads in Argentina are paved, and the flatness of the land makes drainage difficult, so that frequently heavy rains make roads impassable. Gasoline and tires cost nearly twice as much as they do in the United States, even though some of the gasoline is produced locally and domestic manufacture of tires began in 1931. The cars themselves cost anywhere from 75 per cent to 100 per cent. more than in the United States, as the result of a 32 per cent. duty, freight and other costs of importation.

It is chiefly to reduce the cost of automotive vehicles to the Argentine buyer that cars and trucks are imported partially disassembled and put together in Buenos Aires. The saving in freight is passed on to the Argentine buyer in lower prices, so that his net saving is said to run between 5 and 8 per cent. on partially assembled cars and as high as 12 per cent. to 15 per cent. on cars completely assembled in Argentina.

The complete assembling of automotive vehicles is limited to cars and trucks of low price, as these are sold in sufficiently large volume to assure steady employment for the large number of men and machines necessary for a complete assembly plant. In 1928 some 68 per cent. of the cars sold in Argentina were low-price makes, and this proportion increased to 80 per cent. in 1930. Low-price trucks accounted for 74 per cent. in 1929 and for 78 per cent. in 1930. Medium-price cars are only partially assembled, and on high-price cars no work is done except for an occasional custom body built locally.

High-capacity trucks are assembled locally in only one or two cases, where the distributor handles these trucks along with low-price cars so that they can use the same assembly equipment. The smaller number of higher-capacity trucks sold discourages local assembly of them, but the principal deterrent is the fact that for several years prior to January, 1931, truck chassis paid no duty. Since the reapplication of the 32 per cent. duty on trucks at that time, it is possible that more work will be done on higher-price trucks in order to take advantage of the lower customs valuations on unassembled trucks and the consequent saving in duty.

Truck and bus bodies, however, have always paid duty, and they have been made locally for this reason and because of the saving in freight. One truck called "Hispano Argentina" is practically manufactured in Argentina out of parts imported from the United States and Europe. Although comparatively few units were sold in the past, under the protection of the new duties the production of this make may exceed the two or three units now reported to be assembled each day.

In some countries the branch assembly plants of American car manufacturers purchase a large proportion of their parts and equipment locally or from other countries outside of the United States. In Argentina, however, practically 100 per cent. of the material is brought from the United States. Only when some part of the car has been damaged or fails to arrive is that part of the new car made locally. Occasionally accessories made by local plants are added to the car, and sometimes paint is purchased from local stocks when a special color job is wanted.

Local manufacturers, however, make automobile replacement parts, such as axles, ring gears, springs, bumpers, iron pistons, etc., and these are sometimes purchased by distributors for repair work on their cars. The establishment in 1931 of two American tire manufacturing plants in Argentina may result in cars being imported from the United States without tires and equipped with those of Argentine manufacture.

There are several reasons why more materials are not purchased locally or from other countries which may produce them more cheaply than the United States. The factory price for a completely knocked-down car is naturally lower than for an assembled car, but to take out of the complete set of parts one or two items which might be substituted locally is expensive, so that very little reduction can be made by the factory for omitting that part. Furthermore, the duty on individual parts is relatively higher than on a complete unassembled car.

As Argentina continues to develop and to build the improved roads that local sentiment seems to favor increasingly, the demand for automobiles and trucks will doubtless increase, and local assembly may assume a more and more important place. It is very probable, however, that the majority of the parts for cars and trucks will be imported from the United States.

TOLMAN MOTORS TO HANDLE DE VAUX SIX IN NEW HAVEN

New Haven, Conn., July 22.—Tolman Motors Corporation, with showrooms at State and Trumbull Streets, has been formed to handle the new De Vaux six in New Haven. Ruel Tolman is president, with G. Newton Tolman vice-president and Wallace Tolman a director. The concern will be operated separately from the long-established Franklin dealership of Cowles, Tolman & Sons, Inc.

PENCE DISTRIBUTORSHIP BROADENED BY WILLYS

Louisville, Ky., July 22.—Bacon Pence, Inc., dealer-distributor for the Willys-Overland Company, with headquarters at 909 East Broadway, has announced that its distribution territory has been enlarged to take in all of Tennessee and northern Alabama, it already having Kentucky and southern Indiana.

It was stated that the company's present territory represents the largest distributor territory of any Willys-Overland distibutor in the country.

To take care of the enlarged territory a branch is being established at Nashville, Tenn., which will be virtually a duplicate of the establishment at Louisville. The Nashville division will service Wiliys-Overland dealers over a considerable territory in Tennessee and Alabama, and service owners in Nashville and nearby territory.

NEW SERVICE SHOP

Buffalo, N. Y., July 22.—The Auto Service Shop has been established in modern quarters here under the management of Richard G. Schultz, 54 Crestwood Ave.; Elmer G. Walters, 107 Dunlop St., and George Waldraff, 1042 Tifft St.

CUMULATIVE NEW PASSENGER CAR

Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Some of this data has been published previously, but it is given here complete for the convenience of our subscribers. Readers desiring

In this table 26 states and the District of Columbia **Returns for today: Alabama, Neb**

States	Auburn	Austin	Buick	Cadillac	Chevrolet	Chrysler	Cord	De Soto	De Vaux	Dodge	Durant	Essex	Ford	Franklin	Graham	Hudson	Hupmobile	La Salle
Alabama	12	1	40	4	671	23		11		33		6	495		1	2	4	2
Arkansas	1		12		305	22		6		23		1	174		8	1	1	1
Conn.	89	3	237	36	973	133		104	14	137	5	123	842	7	54	49	35	22
Delaware	5	1	47	4	200	20		3		6	6	10	162		1	5	2	2
Florida	46	5	100	2	1170	94		18	4	51	4	60	1104	5	50	26	9	4
Idaho	5	1	13		241	14	2	14	8	25	6	4	233	1	7	7		
Illinois	261	10	388	97	2979	416	21	191	35	368	15	229	3429	20	147	88	115	68
Indiana	126	2	151	20	1304	130	5	142	8	147	11	115	1119	4	50	47	39	6
Maryland	54	2	118	15	1347	80	1	42	2	40	17	76	915	5	38	27	43	7
Minnesota	54	2	97	6	1651	112		47	10	85	11	85	923		62	39	33	8
Missouri	79	5	272	20	2398	151	5	86	18	149	18	121	1669	8	79	38	67	13
Montana	7	1	27	1	241	29		22	4	19	6	9	186	4	3	7	1	2
Nebraska	23	5	80	3	1024	57	1	11		60	5	23	801	1	16	13	19	
N. Hamp.	10	1	48	5	413	34		13	5	19	6	36	377	3	11	14	9	5
N. Ca'lina	19	6	77	2	832	88	1	16	7	61	1	54	935		11	22	3	4
N. Dakota	5	1	26		349	19		1	2	22	7	12	271		7	9	3	1
Ohio	250	7	381	74	3609	352	9	319	26	295	58	348	3255	17	141	104	117	39
Penn.	437	21	886	103	5536	877	7	394	84	602	78	514	4059	53	270	172	232	73
Rh. Isle.	37	2	101	14	513	79	1	79	1	52	4	56	402	4	20	19	11	11
S. Ca'lina	14	2	40	1	670	42		22		32		20	537		1	14	10	4
S. Dakota	5	1	30		378	41		14	7	39	4	19	261		3	6	12	
Utah	11		20	5	278	9		10	10	27	3	27	213		10	10	5	1
Virginia	27	9	108	11	1717	86	4	80	1	93	2	90	1617	2	23	25	28	4
Wash.	10	5	53	6	396	44	1	31	6	27	7	20	368	1	16	6	11	
W. Va.	28	4	43	6	686	84		29	8	83	1	41	608	1	32	20	14	4
Wisconsin	76	2	175	13	1278	117	7	70	35	124	16	107	885	3	37	36	25	12
Dist. of C.	40	4	124	12	833	56	1	50		67	6	44	935	3	25	11	34	11
Totals	1731	103	3694	460	31992	3209	66	1825	295	2686	297	2250	26775	142	1123	817	882	304
Ala., '30			50	6	755	22		15		25		15	990		24	12	15	6
Ark., '30	1	1	21	1	280	14		9		23	6	14	430		7	5	2	2
Conn., '30	36		235	*40	795	171	2	116		160	23	156	1592	85	93	72	99	48
Dela., '30	1		46	11	189	35	1	5		5	11	13	348	1	7	6	10	5
Fla., '30	4		73	5	675	74	1	28		37	5	47	1239	6	46	32	14	10
Idaho, '30	1		30		256	16	1	8		25	21	19	381	1	9	9	4	
Ill., 1930	68		656	61	3117	490	26	258		449	71	314	6752	58	232	167	217	88
Ind., '30	36	4	176	11	1324	140	11	130		173	30	165	2568	7	61	60	49	20
Md., '30	12		131	7	1066	83	1	24		69	18	99	1429	4	72	31	45	11
Minn., '30	7		93	6	1725	139	3	43		92	23	69	2789	2	93	35	53	14
Mo., '30	18	1	157	19	1893	140	8	60		159	31	100	2857	8	114	55	51	25
Mont., '30	5		27	3	270	26	2	29		22	13	26	369	6	4	9	14	7
Neb., '30	3	1	66	4	1310	75	3	27		97	25	29	1773	2	26	10	29	2
N. H., '30	10		42	3	270	38		19		30	8	46	573	2	17	13	18	3
N. C., '30	1		83	4	910	81	1	26		86	2	46	1599	2	30	37	10	1
N. D., '30	1		23	1	590	47		8		35	23	23	831	1	17	12	2	
Ohio, '30	67	3	419	50	3126	401	14	302		358	120	407	6808	32	220	193	229	57
Penn., '30	112	7	997	96	4723	1094	16	496		720	201	591	9548	77	468	317	347	113
R. I., '30	8		71	6	332	70	1	66		50	10	44	604	4	25	15	15	8
S. C., '30			34	1	389	16		23		20	2	26	799	1	5	15	9	
S. D., '30	3		39	1	645	54		10		61	25	42	825	1	16	13	19	
Utah, '30	9		28	5	324	34	2	31		42	45	35	586	2	33	17	9	3
Va., '30	4		150	8	1498	100		45		100	18	82	2116	5	36	25	47	12
Wash., '30	12		143	6	436	71	2	62		54	68	31	1129	5	17	23	45	6
W. Va., '30	6		60	2	805	63	3	35		129	29	69	1265	6	60	30	21	8
Wis., '30	19		208	14	1666	168	2	71		170	48	160	2591	14	96	71	36	6
D. of C., '30	11		68	7	431	32	1	18		33	13	46	1078	3	39	22	32	15
Totals, '30	455	17	4146	378	29800	3694	101	2004	*	3224	889	2714	53869	335	1867	1306	* 1441	470

*Not in production

GREAT LAKES STATES REPORT CONTINUED DROP IN CAR SALES

New York, July 22.—Retail sales of new passenger cars in the states in the region of the Great Lakes continued in June to run considerably under a year ago, the four states of Illinois, Indiana, Minnesota and Wisconsin having reported a decline in the aggregate of 34 per cent. from a year ago.

The June total in these states was 23,396, as against 35,587 in the corresponding month of last year, and comparing with 37,745 in May, a seasonal decline of 38 per cent.

For the first six months of this year retail sales of cars in these four states amounted to 169,719, as compared with 252,065 in the corresponding period of 1930, a decline of 32 per cent.

Illinois reported a decline of 26 per cent. in June from May and 31 per cent. from a year ago. The six months' falling off from a year ago was 32 per cent.

Indiana's June sales were 46 per cent. below June, 1930, while the seasonal falling off from May was 30 per cent. Registrations in Indiana in the first half year were 30 per cent. below the similar 1930 period.

Minnesota's June total was 42 per cent. under May and 37 per cent. below a year ago. The decline in the six months was 31 per cent.

Wisconsin reported June registrations 49 per cent. below those of the preceding month and 40 per cent. under a year ago. The falling off in the first six months was 38 per cent.

The following tables show the month by month new car registrations in the four states for the first half of 1931, as compared with the corresponding period of last year:

ILLINOIS	1931	1930
January	9,365	12,555
February	9,772	13,678
March	11,583	20,859
April	17,004	22,415
May	15,349	23,046
June	11,241	16,339
Totals	74,314	108,892
INDIANA		
January	2,772	5,482
February	3,375	6,374
March	5,883	12,909
April	9,391	8,475
May	7,803	10,164
June	4,251	6,105
Totals	34,475	49,509
MINNESOTA		
January	2,361	2,581
February	1,678	3,372
March	8,186	7,226
April	7,816	14,501
May	6,882	11,064
June	3,998	6,379
Totals	30,921	45,123
WISCONSIN		
January	2,892	4,407
February	3,334	4,423
March	5,439	8,903
April	6,727	9,571
May	7,711	14,493
June	3,906	6,764
Totals	30,009	48,561

CAR REPAIRMEN FORM LOUISVILLE ASSOCIATION

Louisville, Ky., July 22.—The Auto Repairmen's Protective Association has recently been organized in Louisville, composed of about one hundred automobile repair organizations of Louisville and suburbs, a meeting having been held at the Tyler Hotel last Friday night and another scheduled for this Friday night.

According to reports, this organization is considering plans for establishment of a co-operative wholesale auto parts depot, partly as a retaliatory measure in connection with some local dealer-distributor organizations having discontinued the practice of selling parts to repair men at a discount from regular retail prices.

Scandinavian Automotive Trade Rivalry Heightened By Swedish Car Builder

THE progress made by Aktieholaget Volvo of Goteborg, Sweden, since the company commenced production four years ago, has considerably improved its competitive position in the automotive market of Sweden and adjacent countries. The company, which at first was merely an assembly organization, has acquired a motor manufacturing plant and, supported by strong financial interests and with a new model, is making a definite bid for a greater share of the trade in the Baltic markets.

The Volvo company was organized in 1915, but until 1927 did only experimental work. In the latter year it commenced production of a four-cylinder passenger car, and sold 297 units, valued at $373,203. In 1928 it began production of light trucks, and increased its total output to 983 units, valued at $1,053,575. In 1929 a six-cylinder model was added, and production increased to 1,383 units that were sold for $1,703,684. Operations for the first two years resulted in a net loss of $18,760, but in 1929 this was converted into a net profit of $524.

From its inception the company was controlled by interests connected with the Svenska Kullagerfabriken (Swedish ball-bearing factory, generally known as "S. K. F."), and its experimental work was done in close co-operation with that company. In 1927 a separate factory building, owned by S. K. F., was rented and later purchased by Volvo for its manufacturing operations. Subsequently the company's board of directors was increased from two to six by the addition of the founder, two other directors of S. K. F., and a prominent Swedish capitalist. The affiliation of the S. K. F. officials was taken to indicate that all further capital requirements of Volvo would be supplied by the larger company.

Until the increase of its board of directors Volvo had not manufactured any part except the body and had operated merely as an assembly plant. Soon afterward, however, the manufacture of the four-cylinder models was discontinued, new six-cylinder cars and trucks were introduced, and the purchase by Volvo of Aktebolaget Pentaverken, of Skovde, Sweden, which had been manufacturing motors for Volvo cars and trucks, was announced. The capital of Volvo had previously been increased from $53,500 to $1,125,600. The total capital stock of Akt. Pentaverken, all of which was purchased by Volvo, amounted to $268,000 preferred and $187,000 ordinary shares. Up to the time of purchase, the motor company had supplied 4,000 motors to Volvo. With the acquisition of a motor factory, the Volvo organization definitely entered the manufacturing field, with prospects that more parts would be later produced.

In the first four years of production Volvo increased its output by nearly 700 per cent.—from 297 units in 1927 to 1,998 in 1930. The value of the output increased from $373,205 to $2,665,298. In August, 1930, the manufacture of the four-thousandth Volvo coincided with announcement of the first series of the Volvo "750" six-cylinder line. Later, a second series, the "652," was announced. That model had a more capacious body, hydraulic brakes, larger tires and other minor improvements. It was placed at $1,850.

Until 1930 Volvo sales had been almost entirely confined to Sweden. In that year, however, a subsidiary company was organized to handle distribution in Norway, and 150 automobiles were exported to that country, Denmark and Finland. It is evident that this move indicates that Volvo intends to widen its field and engage more actively in exporting.

Until November, 1930, the prices of the Volvo line were $1,850 for the six-cylinder, four-door sedan; $1,333 to $1,380 for the one and one-half-ton truck chassis, and $1,555 to $1,601 for the two-ton chassis. In that month all prices were substantially reduced, a fact which was given in the 1930 report of the board as proof of the company's success and of its good prospects for the future. The report also contained the 1930 balance sheet of the company, showing an increase for "manufacturer's account" from $181,442 in 1929 to $341,118 in 1930.

The chief competition of Volvo is expected to be offered largely in the medium priced range. The 1931 production schedule of the company calls for at least 3,000 vehicles, all six-cylinder models, which would be an increase of more than one-third over the 1930 output.

SAYERS & SCOVILL APPOINT SOUTHERN REPRESENTATIVES

Cincinnati, July 22.—Owing to the death of R. Earl Blanchard, who represented the Sayers & Scovill Company many years, William G. Owens will represent the firm in North Carolina. He has been with the company for a number of years. B. Frank Hendricks has been appointed representative in South Carolina, Georgia and Florida.

REGISTRATION STATISTICS, JUNE, 1931

Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. county, city or town lists, or lists of owners in any given section, may obtain these by addressing any of these three companies

raska, Ohio, Virginia, Washington

States	Lincoln	Marmon	Nash	Oakland	Oldsmobile	Packard	Peerless	Pierce-Arrow	Plymouth	Pontiac	Reo	Studebaker	Whippet	Willys	Willys-Knight	Miscellaneous	Totals
Alabama	1	2	6	3	2	7			23	26		10	1	29			1,415
Arkansas			11	1	4	1			14	16	1	9		4			616
Conn.	6	11	88	41	93	57		21	43	197	13	96		53	10	2	3,594
Delaware	1	1	11	5	16	6		2	6	30		7		4	2		565
Florida	7	15	35	15	26	12		6	45	137	16	45	2	46	3		3,162
Idaho	1	1	11	5	11	2			24	15	2	18	2	20	3		696
Illinois	33	8	192	74	560	130	24	26	145	585	22	303	1	213	34	14	11,241
Indiana	2	23	52	22	140	13		5	84	181	9	143	3	138	3	7	4,251
Maryland	7	3	90	33	48	26	10	9	55	167	10	63	4	49	7	2	3,412
Minnesota	3		37	17	99	13		4	155	219	5	64	4	144	9		3,998
Missouri	11	16	117	51	138	19	2	17	126	283	15	115	11	109	10	6	6,242
Montana		1	16	7	13			1	21	36		8	2	24	2		700
Nebraska	2	3	33	7	43	10		1	65	89	2	56	1	76	11		2,541
N. Hamp.	3	4	41	16	46	7			40	59	3	29		39	2		1,298
N. Ca'lina			6	3	35	4		2	36	61	4	16		27	3		2,336
N. Dakota	1	1	13	3	10				32	41	3	9	3	33	5		889
Ohio	18	49	216	102	324	66	14	29	416	607	29	273	14	381	57	7	12,003
Penn.	33	50	372	148	497	125	15	46	403	758	40	419	11	517	87	19	17,938
Rh. Isle.	3		39	14	29	11	3	11	19	98	17	30		33	6		1,719
S. Ca'lina	1		3	2	16	3			24	35	2	10		7			1,512
S. Dakota		1	7	6	37				35	30	2	15	3	16	1	1	974
Utah		2	15	5	13	2			3	17	1	11	1	10	1		720
Virginia	2	9	32	25	52	16		3	54	174	2	55	2	43	3		4,399
Wash.	1		14	12	35	5	1	1	28	45	5	55	1	46	3		1,260
W. Va.	5	1	23	19	40	8			84	103	11	40		91	2	1	2,120
Wisconsin	4	4	149	34	102	24	2	3	97	224	11	102	5	112	12	3	3,906
Dist. of C.	6	7	47	18	66	25		6	30	107	2	78		28	6	1	2,683
Totals	151	212	1676	688	2495	592	71	193	2107	4340	227	2079	71	2292	282	63	96,190
Ala., '30	1	4	7	4	19	9			32	3	5	15	9	10	2		2,055
Ark., '30	2		9	3	4	1		3	21	8		10	2	2	1		882
Conn., '30	13	30	139	59	74	125	7	20	103	160	35	116	12	39	30	17	4,702
Dela., '30	1	1	3	5	4	17		2	22	29		9	3	6	1	1	798
Fla., '30	2	13	23	12	27	16		3	58	52	12	10	10	10	8	2	2,554
Idaho, '30	1		16	6	8	1			31	18	1	16	9	5	1		894
Ill., 1930	46	72	405	97	446	323	13	42	543	409	38	422	82	186	88	63	16,339
Ind., '30	7	67	113	42	142	46	4	5	238	171	15	150	30	71	15	24	6,105
Md., '30	4	11	66	32	59	57	1	8	111	98	12	73	36	37	16	24	3,747
Minn., '30	3	12	76	37	104	32	1	2	392	181	13	116	67	124	26	7	6,379
Mo., '30	3	27	112	49	143	70	3	32	190	141	9	63	73	104	23	34	6,772
Mont., '30		5	25	11	9				37	33	4	15	16	13	5		1,005
Neb., '30	2	10	33	12	75	16	2	2	154	65	5	71	33	62	19	2	4,065
N. H., '30	1	11	44	7	25	16		3	52	30	13	20	6	16	6	3	1,345
N. C., '30	3	5	19	10	29	15	2	2	74	49	3	21	13	22	3		3,189
N. D., '30		3	43	14	21	1			78	52	3	21	39	53	9	3	1,954
Ohio, '30	40	97	294	119	386	262	55	36	698	438	47	288	126	244	112	35	16,083
Penn., '30	37	98	576	289	580	515	60	72	1081	626	74	564	155	382	143	78	25,253
R. I., '30	2	2	44	17	22	30	12	9	49	51	17	27	3	19	15		1,648
S. C., '30	1	1	9	2	10	9			16	16	2	8	3	2	1		1,420
S. D., '30		5	24	6	87	7	1		81	37	2	44	24	28	3	3	2,106
Utah, '30		7	17	16	21	12		1	22	19	3	23	4	2	2	3	1,357
Va., '30	1	18	28	31	49	42	4	1	132	123	7	44	27	52	11	23	4,839
Wash., '30		5	37	14	39	29		4	89	44	4	81	20	34	22	4	2,536
W. Va., '30	2	23	41	32	40	28		3	118	91	5	46	45	76	16	5	3,162
Wis., '30	1	19	199	60	138	50	10	15	330	207	21	146	69	122	22	15	6,764
D. of C., '30	5	5	21	29	57	48	12	4	58	71	3	43	6	6	13	6	2,236
Totals, '30	178	551	2423	1015	2618	1777	187	269	4810	3222	353	2462	922	1727	613	352	130,189

Production - - Engineering - - Factory -

Gasoline Service Station Illumination

By R. J. SWACKHAMER
Illuminating Engineering Laboratory, General Electric Company

The following, in part, is an article which appears in the current issue of the General Electric Review, and is published through the courtesy of the General Electric Company. It outlines the latest practice in the exterior lighting of gasoline service stations. Suggestions are given for the proper method of installation and included are data on this particular lighting problem.

The following points of major importance are considered:

1. Correct appraisal of requirements.
2. Proper classification of stations with respect to lighting.
   (a) Location.
   (b) Adequate intensity.
   (c) Watts per square foot of plot area necessary to produce the intensities listed.
3. The types of lighting equipment best suited for these services.
   (a) Performance of equipments.
4. Incandescent Mazda lamps.
   (a) Guide to choice of lamp sizes.
   (b) Lamps of proper rate voltage.
   (c) Wiring of system to insure efficient operation.
5. Illustration of good practice.
   (a) Importance of proper mounting heights.
   (b) Selection of proper lighting standards.

Oil companies spend thousands of dollars annually on acquiring desirable plots, and when the cost of erecting suitable buildings and equipment is added to this expenditure it is not uncommon for a single service station to cost anywhere from $40,000 to $75,000.

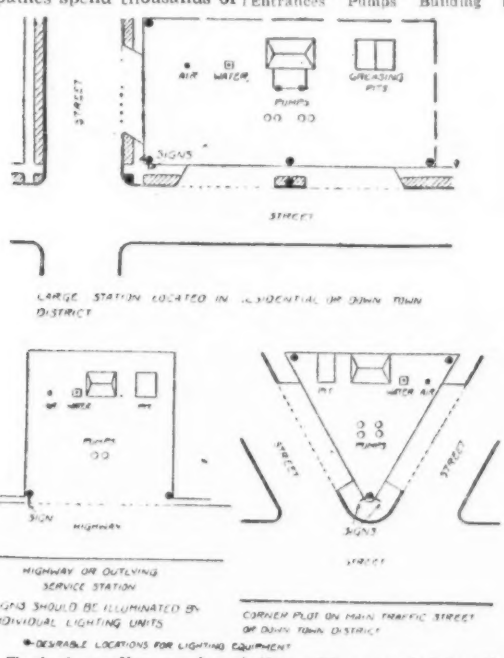


FIG. 1. Typical gasoline service station with suggested locations for lighting equipment

It is the high initial cost that makes it advisable to pay special attention to the exterior illumination, as poor lighting may jeopardize the entire investment.

There are many items to be considered in selecting the most suitable form of lighting equipment. The environment of the station should be taken into account in each case. The following data, given in tabular form, should be useful in helping to select the correct equipment. The general appearance, the illumination, the lighting units and cost and depreciation should be considered.

Correct Appraisal of Requirements

Appearance—General daylight appearance of lighting installation; general night appearance.

Illumination — Illumination at pumps, at entrance, on building, air hose, greasing rackets, etc.; attractiveness from street; absence of glare from street, from sidewalks, to customer, to neighbors, undesirable shadows, undesirable high spots.

Lighting Unit—Over-all efficiency; utilization; appearance; possibility of lamp breakage due to rain; flexibility and ease of adjustment; ability to maintain its initial efficiency and appearance; labor required to clean or refinish; mechanical construction, wind area presented and hazard of falling; ease of erection, handling, carting and storage; life and obsolescence; convenience of obtaining replacements at present and in distant future; service and responsibility of manufacturer.

Costs—Total cost of lighting installation; cost of lighting unit, of lamps, of electricity, of cleaning, of lamp replacement, of refinishing.

Depreciation—Rapidity of depreciation of lamp and unit; ease of cleaning or refinishing; possible efficiency after several years' service; depreciation in appearance with age; possibility of obsolescence.

To furnish a ready means of classifying stations, both as to their locations and to the amount or intensity of light that has been found to be necessary to adequately illuminate them, the following table has been prepared:

Classification of Stations

	Intensity—Foot-Candles— Entrances	Pumps	Building	Average Watts Per Square Ft. of Plot
A	0.5	1-2	0.5-0.75	0.15-0.3
B	1.0	3-5	1-2	0.25-0.4
C	2.0	5-7	2-5	0.5-0.75
D	5.0	10-15	5-10	1.0-1.5

A—Station located on unlighted secondary highways.

B—Same; lighted highways, residential streets.

C—Same; city main traffic thoroughfares.

D—Same; brightly lighted downtown streets.

Types of Equipment

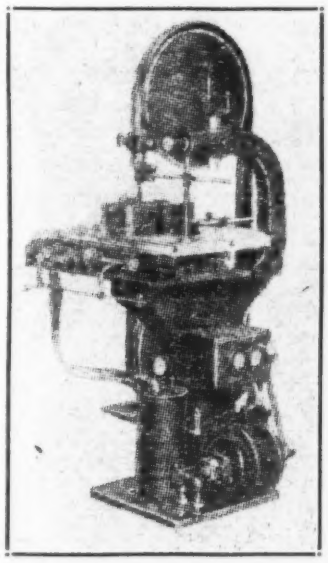
Floodlighting projectors — The floodlighting projector has many characteristics that make its use advisable in this service. When properly mounted and adjusted, it offers a control of light that can not be obtained with other lighting devices. It is built for rugged outdoor service and offers, through the selecion of lamps, reflectors and lenses of unlimited flexibility. The wider beam angles are in most cases best adaptable to service stations because of the short throws encountered. The proper choice of lenses often plays an important part in the night display as well as the suitabilty of the illumination from the utilitarian standpont.

(To be Continued)

Autogiro Refuels in Quick Time

PHOTO SHOWS the first autogiro ever to land at the Kansas City Airport being serviced by a modern airplane refueling unit. The refueler is capable of putting in 500 gallons of gasoline in ten minutes, checking the tires and servicing with water and oil. The autogiro is owned by Johnny Miller, the first man to make a transcontinental trip with the new windmill airplane
Photo, courtesy Columbian Steel Tank Company.

LAIDLAW BAND SAW HAS HYDRAULIC FEED



LAIDLOW metal cutting band saw with hydraulic feed

A low-pressure hydraulic feed has been applied to the type JM metal-cutting bandsaw made by William Laidlaw, Inc., Belmont, N. Y.

The low-pressure feed pump is direct coupled to the motor shaft with a flexible coupling, and the reservoir and piping are located beneath and to the rear of the table but readily accessible. The stationary cylinder is mounted between the carriage and the table, the piston rod being directly connected to the latter. Oil can be admitted to either end of the cylinder. The oil is returned to the reservoir through an adjustable needle valve, and this valve controls the speed at which the table is fed forward. When the control valve handle is moved to the extreme position the table is rapid traversed. An adjustable tappet is provided to close the control valve and stop the feed when the table has traveled a predetermined distance, but because of the low pressure used (approximately 50 pounds per square inch) no damage can be done even though the tappet is not used. There is a positive stop attached to the front vise jaw, which prevents the saw from cutting into the vise. When this stop comes into action the relief valve opens and permits the oil to be returned to the reservoir.

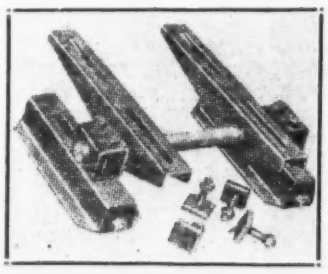
A pressure of 45 pounds per square inch is required for ordinary cutting, but provision is made for 100 pounds pressure per square inch. Eight speed changes, from 100 to 725 feet of saw travel per minute, are provided. For cutting aluminum and other soft metals it is built with speeds up to 2,900 feet per minute. Overall height is 68 inches, distance from the floor 37 inches; floor space 38x38 inches, work table 26x26 inches; approximate weight 1,115 pounds.

A three-quarter horse power motor is required.

LIGHTNESS, ECONOMY FEATURE BASTIAN CUTTING TORCH

A new cutting torch, claimed to be light in weight, balanced and economical in operation, is announced by the Bastian-Blessing Company, Chicago, Ill. The weight of the new type CC cutting torch is 46 ounces with tip attached; it has an over-all length of 20¼ inches. Wide adaptability, as to fuel gases and range, is characteristic of the new model. By changing the tip, it is ready for use with acetylene, hydrogen, carbohydrogen, oxy-acetylene, and the liquefied petroleum gases such as butane, propane, etc., it is claimed.

KRITZER MOTOR MOUNTING



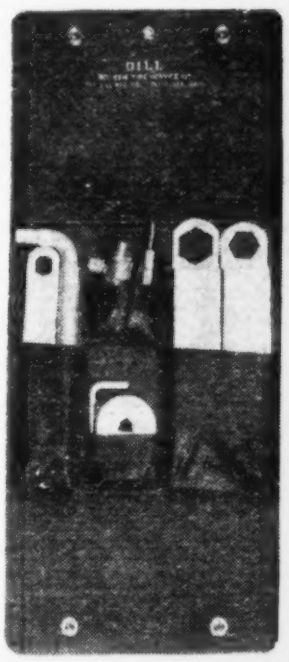
KRITZER floating motor base assembly

A new motor mounting for short drives with either flat or V-belt use is announced by the Kritzer Company, Chicago, Ill. It is claimed that with this type of mounting the motor floats on the load, maintaining just sufficient tension on the belt to carry the load. The nominal increase in belt length is compensated without the use of idlers, it is stated.

The design is such that the weight of the motor is balanced and the motor torque regulates the belt tension. The greater the torque reaction on the frame, the greater the tension in the belt.

The mounting is made of pressed steel and the base offers flexibility of center distance. The pivot shaft is bronze bushed and locked.

DILL TIRE SERVICE TOOL KIT



DILL tire service kit contains tools for tire service

A tire service kit which includes eight tools packed in a leather case has just been announced by the Dill Manufacturing Company, Cleveland, O.

The tools are a new valve holder to hold the valve stem while the hexagon nut is being tightened; a standard hexagon nut wrench; combination valve tool, valve inside extractor, big tube deflator, special screw driver, No. 10 base wrench and a No. 10 hexagon nut wrench.

The kit, it is claimed, contains all the necessary tools to service all standard sizes and types of tires for passenger and commercial cars.

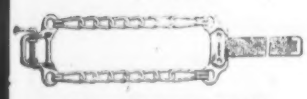
NEW NOYES PLANT TO BE ERECTED IN BINGHAMTON

Binghamton, N. Y., July 22.—Work has been started on the demolition of the plant of the Noyes Company, Inc., manufacturer of horn buttons and miscellaneous automobile equipment. The plant, on the bank of the Chenango River, was erected in 1885 and has become obsolete. It is planned to build a new structure on the site at an early date.

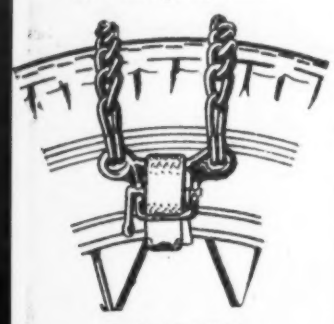
CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

Equipment - - - Development

STAR EMERGENCY CHAIN



Star emergency chain



Chain installed

The Star emergency chain is being placed on the market by the St Pierre Chain Corporation, Worcester, Mass. It consists of two cross chains attached to drop-forged steel clamps and held together through the spokes of the wheel by a web belt and buckle.

The price for different sizes varies from $1 to $1.35 each.

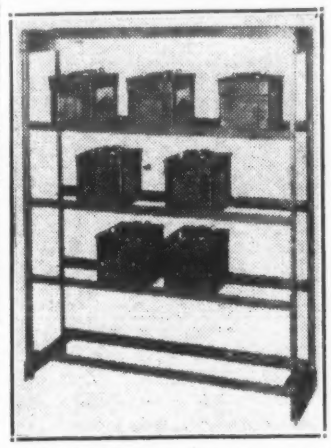
DIAMOND DEVELOPS TWO HOSES

Two new developments in rubber hose are announced by the Diamond Rubber Company, Inc., Akron, O., a car-washing hose and a gasoline hose. The car-washing hose combines plies of wrapped fabric and an outer seamless ply of forty-eight horizontally braided, twisted cords combined with a new rubber compound, which, it is claimed, is resistant to heat and oil. The new hose, it is stated, requires more than 1,300 pounds pressure to burst it.

The gasoline hose has been improved by the use of a newly developed rubber lining, an improved metal lining and a heavier cotton jacket.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

LYON BATTERY RACK



LYON 25-battery capacity rack

A combination battery storage and display rack, with a capacity of twenty-five average-sized automobile batteries, is announced by Lyon Metal Products, Inc., Aurora, Ill.

It is constructed entirely of 1½ inches and 1 inch hard steel angles. It is finished in green-baked enamel, and priced at $7.25.

RUSCO CONDUCTS BIG BRAKE CLINIC

Dallas, Tex., July 22.—More than 200 fleet owners, dealers, garage and service station operators attended the July brake clinic conducted in the Baker Hotel here by the Auto Brake Parts Corporation, Dallas distributor for Rusco brake linings and other products of the Russell Manufacturing Company, Middletown, Conn., as part of the series of clinics being staged by the Russell Company throughout the Southwest to give information on the need for good brakes, their use, application and service. Benjamin McCleskey, manager Auto Brake Parts Corporation, presided.

Speakers were Sergeant L. T. Spencer of the Dallas traffic police; C. H. Nugent, Southwestern Rusco division manager, and H. S. Frisbie, from the Middletown factory, who conducted a demonstration of Rusco brake linings and their application and showed a moving picture of a trip through the Russell factories.

NATIONAL UNIVERSAL GEAR TESTER

For the measurement of the functions of helical gears, the National Broach and Machine Company, Detroit, Mich., has introduced the model SIB universal gear tester.

In use, a rack tooth gauge is inserted between the teeth in alignment with the axis of the gear. A sine bar having a 6-inch center to center distance of the buttons is attached to the rear of the rack gauge and is used to measure the spiral angle. With the gauge fitted snugly between the teeth, the angle is measured by means of a stack of blocks. A dial indicator can be set to zero on the blocks, and then the reading over the sine bar pin will indicate the variation in angularity.

The following functions can be tested on the machine: Spiral angle; eccentricity, index error, tooth form; gear centers for rolling; and, parallel check on spur teeth. Standard equipment checks the first two items whil special equipment is required for the last four.

Cumulative New Commercial Car Registration Statistics, June, 1931

Returns fo todray: Alabama, California, Nebraska, New Hampshire, North Carolina, Rhode Island, Virginia and Washington.

Figures in this table are from R. L. Polk & Co. of Detroit, with the exception of Illinois, which are supplied by the Robinson Advertising Service, Springfield, Ill., and New Jersey, which are furnished by the New Jersey Motor List Co., New Car Division, Trenton, N. J. Some of this data has been published previously, but it is given here complete for the convenience of our subscribers. Readers desiring county, city or town lists, or lists in any given section, may obtain these by addressing any of these three companies.

In this table, 25 states and the District of Columbia.

States	Autocar	Brockway-Indiana	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	International	La France-Republic	Mack	Reo	Sterling	Stewart	Studebaker	Whippet	White	Willys	Willys-Knight	Miscellaneous	Totals	States
Alabama			122		1		107	7	7								1				245	Alabama
Arkansas			33				27	•	4								1				65	Arkansas
California	10	1	479	9	102	14	1051	37	65	5	12	35	9	7	23		14	6		78	1957	California
Delaware	1		40				44		14		1	4						1			105	Delaware
Florida			160		7	7	304		14		1	6					5	1		1	506	Florida
Idaho			50		14		125	2	9		1	2					2	2		4	211	Idaho
Illinois	8	3	350	29	51	2	421	12	98		8	6	1	3	15			18		31	1056	Illinois
Indiana		6	175	2	24	2	183	21	47	2	7	4		4	8	1	1	10		10	507	Indiana
Maryland	14	6	162	8	20	2	190	11	50	1	7	15	2	1	9	1	9	1	1	13	523	Maryland
Minnesota			190	8	18	2	183	4	62	1		12			6		5	17		6	514	Minnesota
Missouri	1	4	423	3	44	6	421	37	64	1	3	9	5		6	5	5	10		30	1077	Missouri
Montana			44		4		67	1	18			1						1		3	139	Montana
Nebraska			128	1	15	3	130	4	41		4	4			4			8		5	347	Nebraska
New Hamp.	1	1	89	3	5	3	114	5	10		2	2	2	2	2			1			242	New Hamp.
Nor. Carolina			195	2	18		179	12	25	3	1	2			3		3	3		2	448	North Car.
North Dakota			45		5		44	1	57		1	7			5	1		2		1	169	North Dak.
Ohio	5	8	339	2	51	8	489	23	95	5	24	22	1	9	26		28	17	1	55	1208	Ohio
Rh. Island	3		51	2	18	3	98	14	12	2	4	4			2		1	3		5	222	Rhode Isl.
S. Carolina		1	104		9		86	2	4		2	1					2				211	S. Carolina
S. Dakota			52	1	5		43		30			2			5		1	4		1	144	S. Dakota
Utah			52		11		80	8	12		1	3			3		2	1		2	175	Utah
Virginia	3	4	263	3	16	4	313	4	31	2	3	3			2		3	3		6	661	Virginia
Washington			48		7		104	5	10		1	8	2		4		7			12	208	Washington
West Virginia		4	114	6	18		137	2	29	1	1	10	1		4		1	10		5	343	W. Virginia
Wisconsin			310	26	25	3	267	4	72		2	14	4	7	10	1	1	20		16	782	Wisconsin
Dist. of Col.	8		38	1	8		106	14	10		2	2	2				6	1		3	201	Dist. of Col.
Totals, 1931	54	38	4056	106	496	59	5313	230	890	23	88	178	29	33	137	9	98	140	2	287	12266	Totals
Ala., 1930			121		5		195	5	3	2					2		11				344	Ala., 1930
Ark., 1930			81		1		70		9								3				164	Ark., 1930
Calif., 1930	7		554	7	96	14	1243	94	59	14	22	59	20	7	8	1	53	4	4	128	2394	Calif., 1930
Delaware, '30		1	33		1		50	2	3		3	2		1						1	97	Delaware, '30
Florida, 1930		2	95		4		218	3	8		3	6					2			2	343	Florida, 1930
Idaho, 1930			81		5		97	2	20		1	2					2			5	215	Idaho, 1930
Illinois, 1930	1		442	58	45	4	590	28	110		9	18	2	1		6	8	5	2	56	1385	Illinois, 1930
Indiana, 1930		61	200	2	24	1	341	38	56			9		5	1	6	1	5		16	766	Indiana, '30
Maryland, '30	8	14	112	5	12	3	237	17	30	1	27	5		3	1	1	18	5		7	506	Md., 1930
Minn., 1930		3	238	23	22	2	376	7	69	1	2	7			1	3	2	13		12	781	Minn., 1930
Missouri, '30	4	5	306	12	25	2	429	26	33	2	10	5		2	2	4	13	6	1	18	905	Mo., 1930
Montana, '30			45		4		78	4	16			1			1	1	1			2	153	Mont., 1930
Nebraska		9	179		9		233	10	39		3	1			1	2	5	5	2	7	505	Neb., 1930
New Hamp.		5	84	12	9	1	138	2	1		2	9	1	2				2		1	269	N. Hamp.,'30
Nor. Car., '30			203	1	8		209	5	13			2					1	3		1	446	N. Car., '30
Nor. Dak., '30			58		7		85	3	32			3			1	2		1	1	3	196	N. D., 1930
Ohio, 1930	26	9	346	2	59	12	780	67	92		16	40		18	4	17	40	12	2	82	1624	Ohio, 1930
Rho. Isl., '30	6	4	39		5		74	13	9			8	3		3		1	1		6	172	R. Island, '30
S. Car., 1930			90		2		163	1	4		2	1								6	269	S. Car., 1930
S. Dakota, '30			57	1	4	2	60		45			8		1	2		1	8		6	195	S. D., 1930
Utah, 1930			72		10		136	5	9		2	2					1			8	245	Utah, 1930
Virginia, '30	1	2	296	1	18	3	322	13	33	3	5	2		2			13	5	3	5	727	Va., 1930
Wash., 1930			72		8		197	8	19			5	1				7			15	332	Wash., 1930
W. Va., 1930		3	112	2	14		189	20	39			5		1		2	5	3		7	402	W. Va., 1930
Wisconsin, '30		6	405	10	31	5	462	23	82		5	19	3	5	1	3	6	8		20	1094	Wis., 1930
D. of Col., '30	5	1	23	3	9		91	7	1		3	1	3				1			5	153	D. of C., '30
Totals, 1930	58	125	4344	139	437	49	7063	403	834	23	115	220	33	48	28	48	195	86	15	419	14682	Totals

VANE ANALYZES CAMPAIGN TO 'SAVE A LIFE'

CHICAGO, July 22.—C. A. Vane, general manager of the National Automobile Dealers' Association, discusses in the current edition of Nada the findings of the Bureau of Research of Connecticut. Mr. Vane goes into "Save a Life" campaigns and again points out that they rest on the fallacy that the majority of accidents are caused by defective mechanism of automobiles.

His statement follows:

"When the 'Save a Life' campaigns were first introduced in the automobile trade I voiced as an objection that they rested on the fallacy that the majority of accidents were caused by defective mechanism of the vehicle and that periodic inspection of cars would reduce the accident rate. It seemed to me also that the plan of enlisting state, county and city officials in these campaigns was just an invitation to progress from voluntary inspection to compulsory inspection, with state politicians and state political machines in control of policies, methods and personnel. While I wish I were less distrustful, I have never known of any job being done under a political set-up half as efficiently as under private for five times the cost.

"However, at the time the campaigns were introduced there were very few records available (and still are, for that matter) on the percentage of defective cars involved in automobile accidents. Lately a few statistics have begun to appear.

"One recent report is that of the state of Connecticut through its Bureau of Research.

"Analysing 15,711 accidents in that state in 1930, the bureau reveals that only 558 accidents were caused by defective equipment. And of these the largest number were not due to faulty brakes, or faulty headlights, or broken rear vision mirrors, but wornout tires. There were 189 of these tire failures, nearly one-third of the 558 instances.

"The greatest single cause of accidents to the Connecticut finding was due just to 'human cussedness,' the refusal of a driver to yield right of way. There were 3.539 of the 15,711 accidents due to this one cause alone. Nearly 2,000 other accidents might also be laid to this trait of human cussedness, but were labeled by the research department as due to 'excessive speed.'

"I have no doubt that an honest, impartial fact-finding in any other state would support the result of the Connecticut survey.

"It is easy to inveigh against the vehicle. Not so politic to correct individuals.

"It was bad enough to have outsiders charge that our vehicles were so imperfect mechanically that we were endangering every human life on the highway, but to have part of the industry agree with that view and join the boys who were whooping it up against us seemed to be just a little more stupidity than even we ought to take part in.

"The publication of the Connecticut survey ought to recall to our own people at least that motor vehicles are safe and are being made inherently safer year after year. Unless we do remember that and resist further attempts to burn down the barn just to destroy the rats' nest, automobiling will become so strangled with regulation that future transcontinental touring will be done on roller skates."

BUYS TIRE FIRM

Evansville, Ind., July 22.—B. H. Wiseman, formerly with the Chatham Tire Company, Savannah, Ga., has purchased the interest of H. O. Sandborn, former president of the Bayard Tire Company, Goodyear distributor, 4th and Walnut Streets, and has assumed active management.

DODGE DEALER NAMED

Pontiac, Mich., July 22.—Henry S. Thompson Company has been appointed Pontiac dealership for the Dodge and Plymouth automobiles, with Fred W. Kalsew as manager. The Thompson Company will continue to be local agents for the Studebaker also.

MAJOR SPECIFICATIONS AND MECHANICAL DETAILS

Make and Model	Weight—5-P. Sedan	Wheel Base	Engine Make	Thermostat Used	Valve Arrangement	Cylinders	Bore and Stroke	Piston Disp.	Compression Ratio	Tax H. P.	Brake, H.P. and Peak R. P. M.	Pist. Make or Material	No. Main Br.	Oil Purifier	Fuel Cleaner	Carburetor	Air Cleaner
Auburn 8-98	3916	127	Lyc	Dole	L	8	3 x4¾	263	*5.26	28.8	98@3400	*Alum	5	Pur	—	Sch	No
Austin	$1130	75	Own	——	L	4	2.2x3	45.6	5.1	7.8	13@3000	Alum	2	—	—	Til	No
Buick 8-50	3170	114	Own	Bish-Bab	O	8	2⅞x4¼	220.7	4.75	26.45	77@3200	CI	5	AC	AC	Mar	AC
Buick 8-60	3795	118	Own	Bish-Bab	O	8	3⅛x4⅝	272.6	4.63	30.02	90@3000	CI	5	AC	AC	Mar	AC
Buick 8-80	4255	124	Own	Bish-Bab	O	8	3⅝x5	344.8	4.5	35.12	104@2800	CI	5	AC	AC	Mar	AC
Buick 8-90	4340	132	Own	Bish-Bab	O	8	3⅝x5	344.8	4.5	35.12	104@2800	CI	5	AC	AC	Mar	AC
Cadillac V-8	4645	134	Own	Yes	LV	8	3⅜x4⅛	353	5.35	36.45	95@3000	CI	3	AC	Gas	Own	No
Cadillac V-12	5480	140–143	Own	Own	O	12	3⅛x4	368	5.5	46.9	135@3400	CI	4	AC	Gas	Own	No
Cadillac V-16	6100	148	Own	Yes	O	16	3 x4	452.0	5.50	57.5	165@3400	CI	5	AC	Gas	Own	No
Chevrolet	2685	109	Own	No	O	6	3⅛x3¾	194.0	5.00	26.3	50@2600	CI	3	—	AC	Car	AC
Chrysler 6	2850	*175⅞	Own	Yes	L	6	3¼x4⅜	217.8	5.35	25.35	70@3200	*Alum	4	—	AC	Sch	Yes
Chrysler 8	3365	*186⅛	Own	Yes	L	8	3⅛x4¼	260.8	5.30	31.25	88@3400	*Alum	5	Yes	AC	Str	Yes
Chrysler 8 De L.	——	187⅞	Own	Yes	L	8	3¼x4¼	282.1	5.20	33.80	94@3400	*Alum	5	Yes	Yes	Str	Yes
Chrysler Imp. 8	4725	*211	Own	Yes	L	8	3½x5	384.8	5.01	39.2	125@3200	*Alum	9	Yes	AC	Str	Yes
Cord (Fr. Wh. D.)	4620	137½	Lyc	——	L	8	3¼x4½	298.6	5.25	33.8	115@3300	*Alum	5	Pur	AC	Sch	No
De Soto Six	2695	*169⅜	Own	Yes	L	6	3¼x4⅛	205.3	5.35	25.35	67@3200	*Alum	4	—	AC	Car	Yes
De Soto Eight	3025	*177	Own	Yes	L	8	2⅞x4¼	220.7	6.40	26.45	77@3400	*Alum	5	—	AC	Str	Yes
De Vaux 6-75	2810	113	Hall	Dole	L	6	3⅛x5	214.7	5.41	27.34	70@3400	Alum	4	AC	Ste	Til	AC
Dodge Six	2820	114¼	Own	Yes	L	6	3¼x4¼	211.5	5.20	25.35	68@3200	*Alum	4	No	AC	Car	AC
Dodge Eight	3174	118¼	Own	Yes	L	8	3 x4¼	240.3	5.40	28.80	84@3400	*Alum	5	Pur	AC	Str	AC
Durant 610	2780	112	Con	Bish-Bab	L	4	3⅞x4¼	200	4.80	24.0	50@2800	*Alum	3	AC	AC	Til	Til
Durant 612	2820	112	Con	Bish-Bab	L	6	3¼x4	199	5.32	25.4	71@3300	*Alum	4	AC	AC	Str	AC
Durant 614	3010	112	Con	Bish-Bab	L	6	3¼x4	199	5.32	25.4	71@3300	*Alum	4	AC	AC	Str	AC
Durant 619	2710	109	Con	Bish-Bab	L	6	3¼x4	199.0	5.32	25.4	71@3300	*Alum	4	AC	AC	Til	AC
Essex Super Six	2750	**113	Own	——	L	6	2⅞x4½	175.3	5.80	19.8	60@3300	Alum	3	—	Ste	Mar	AC
Ford A	2375	103½	Own	——	L	4	3⅞x4¼	200.5	4.22	24.03	40@2200	Alum	3	—	—	Zen	—
Fr'klin S 15 Trans.	3930	125	Own	Bish-Bab	*O	6	3½x4¾	274	5.30	29.4	100@3100	*Alum	7	AC	AC	Str	AC
Fr'klin S 15 Trans.	4130	132	Own	Bish-Bab	*O	6	3½x4¾	274	5.30	29.4	100@3100	*Alum	7	AC	AC	Str	AC
Fr'klin S 15 De L	4220	132	Own	Bish-Bab	*O	6	3½x4¾	274	5.30	29.4	100@3100	*Alum	7	AC	AC	Str	AC
Graham Bros. 6	3100	113	Own	Yes	L	6	3⅛x4½	207	5.45	23.4	70@3200	*Alum	7	—	AC	Sch	Yes
Graham Std. 6	3265	115	Own	Yes	L	6	3¼x4½	224	5.45	25.35	76@3400	*Alum	7	—	AC	DL	Yes
Graham Spl. 6	3330	115	Own	Yes	L	6	3¼x4½	224	5.45	25.35	76@3400	*Alum	7	—	AC	DL	Yes
Graham Spl. 8	3560	120	Own	Yes	L	8	3⅛x4	245	5.45	31.25	85@3400	*Alum	5	AC	AC	DL	Yes
Graham Cust. 8	4100	134	Own	Yes	L	8	3¼x4½	298	5.20	33.80	100@3400	*Alum	5	AC	AC	DL	Yes
Hudson Greater 8	3115	119-126	Own	——	L	8	2⅞x4½	233.7	5.80	26.4	87@3600	Alum	5	—	Ste	Mar	AC
Hupmobile Cen. 6	2985	114	Own	Yes	L	6	3¼x4¼	211.6	5.10	25.35	70@3200	Alum	4	AC	Ste	Str	Yes
Hupmobile Cen. 8	3275	118	Own	Pines	L	8	2⅞x4⅝	240.2	5.20	26.45	90@3200	Alum	5	Pur	Ste	Str	Yes
Hupmobile C	3730	121	Own	Pines	L	8	3 x4¾	268.6	5.20	28.8	100@3200	CI	5	Pur	Ste	Str	Yes
Hupmobile H & U	**	125–137	Own	Pines	L	8	3½x4¾	365.6	5.20	39.2	133@3400	Alum	5	Pur	Ste	Str	AM
La Salle V-8	4635	134	Own	Yes	LV	8	3⅜x4⅛	353	5.35	36.45	95@3000	CI	3	AC	Gas	Own	—
Lincoln	5300	145	Own	Ful	L	8	3½x5	384	5.23	39.2	120@2900	Alum	5	Pur	Ste	Str	Un
Marmon 70	2823	112¾	Own	Pines	L	8	2⅞x4¼	211.2	5.50	25.4	84@3400	Alum	5	AC	AC	Str	AC
Marmon 88	4075	130-136	Own	Pines	L	8	3¼x4¾	315.2	5.50	33.8	125@3400	Alum	5	AC	AC	Str	AC
Marmon 16	5360	145	Own	Pines	O	16	3¼x4	490.8	6.00	62.5	200@3400	Alum	5	AC	AC	Str	AC
Nash 960	2800	114¼	Own	Bish-Bab	L	6	3⅛x4⅜	*201.3	5.00	23.4	65@3200	*Alum	7	AC	AC	Car	AC
Nash 970	3000	116¼	Own	Bish-Bab	L	8	2⅞x4⅜	227.2	5.00	26.4	78@3300	*Alum	9	AC	AC	Str	AC
Nash 980	3360	121	Own	Bish-Bab	O	8	3 x4¼	240	5.25	28.8	94@3400	*Alum	9	AC	AC	Str	AC
Nash 990	4000	124–133	Own	Bish-Bab	O	8	3¼x4½	298.6	5.25	33.8	115@3600	*Alum	9	AC	AC	Str	AC
Oakland V-8	3260	117	Own	Yes	H	8	3⅛x3⅜	251.0	5.00	37.8	85@3400	S St	3	—	AC	Mar	AC
Oldsmobile	2935	113½	Own	——	L	6	3⅜x4⅛	197.5	5.06	24.4	65@3350	CI	4	AC	AC	Str	AC
Packard 901-902	4570	129½-136½	Own	——	L	8	3⅛x5	320.0	6.00	32.5	110@3200	*Alum	9	Yes	Yes	Own	AC
Packard 903-904	5045	142⅛-147⅛	Own	——	L	8	3½x5	384.8	6.00	39.2	135@3200	*Alum	9	Yes	Yes	Own	AC
Peerless St. 8	3642	118	Con	Bish-Bab	L	8	2⅞x4¾	246.0	5.00	26.45	90@3200	*Alum	5	Pur	AC	Sch	AC
Peerless Master 8	4521	125	Con	Bish-Bab	L	8	3⅜x4½	322	5.00	36.45	115@3200	*Alum	5	Pur	AC	Sch	AC
Peerless De L.	4521	125	Con	Bish-Bab	L	8	3⅜x4½	322	5.00	36.45	115@3200	*Alum	5	Pur	AC	Sch	AC
Peerless Custom 8	4766	138	Con	Bish-Bab	L	8	3⅜x4½	322	5.00	36.45	120@3200	*Alum	5	Pur	AC	Sch	AC
Pierce-Arrow 43	4304	134-137	Own	Yes	L	8	3½x4¾	366	5.07	39.2	125@3000	*Alum	9	Han	AC	Str	Un
Pierce-Arrow 41-42	4831	142-147	Own	Yes	L	8	3½x5	385	5.07	39.2	132@3000	*Alum	9	Han	AC	Str	Han
Plymouth	2710	*170	Own	——	L	4	3⅜x4¾	196.1	4.90	21.03	56@2800	*Alum	3	—	AC	Car	Yes
Pontiac	2845	102	Own	Yes	L	6	3⅛x3⅞	200.0	4.90	26.3	60@3000	S St	3	—	AC	Mar	AC
Reo Royale 8-35	4650	135	Own	Pines	L	8	3⅜x5	358	5.30	36.48	125@3300	Alum	9	Han	AC	Sch	Own
Reo Royale 8-31	4375	131	Own	Pines	L	8	3⅜x5	358	5.30	36.48	125@3300	Alum	9	Han	AC	Sch	Own
Reo 8-21	3610	121	Own	Yes	L	8	3 x4¾	268.6	5.37	28.8	90@3300	Alum	5	Han	—	Sch	Un
Reo 6-21	3525	121	Own	Yes	L	6	3⅜x5	268.3	5.30	27.3	85@3200	Alum	7	Han	—	Sch	Un
Reo Fly. Cloud 6-25	3950	125	Own	Pines	L	6	3⅜x5	268.0	5.30	27.34	85@3200	Alum	7	Han	V-S	Sch	Un
Studebaker Six	2920	114	Own	Dole	L	6	3¼x4⅛	205.3	5.20	25.4	70@3200	CI	4	Pur	Ste	Str	No
Studebaker Dict. 8	3095	114	Own	Dole	L	8	3⅛x3¾	221.0	5.00	30.0	81@3200	Alum	9	Pur	Ste	Str	AM
Studebaker Com. 8	3520	124	Own	Dole	L	8	3⅛x4¼	250.4	5.20	30.0	101@3200	Alum	9	Pur	Ste	Str	Un
Studebak'r Pres 80	4250	130	Own	Dole	L	8	3½x4⅜	337	5.10	39.2	122@3200	*Alum	9	Han	Ste	Str	AM
Studebak'r Pres. 90	*4360	136	Own	Dole	L	8	3½x4⅜	337	5.10	39.2	122@3200	*Alum	9	Han	—	Str	AM
Stutz LA	4320	127½	Own	Bish-Bab	O	6	3⅜x4½	241.5	5.10	27.3	85@3150	*Alum	7	Wal	AC	Zen	Un
Stutz MA	4918	134½	Own	Bish-Bab	O	8	3⅜x4½	322	5.10	36.4	113@3300	*Alum	9	Wal	AC	Zen	AM
Stutz MB	4863	145	Own	Bish-Bab	O	8	3⅜x4½	322	5.10	36.4	113@3300	*Alum	9	Wal	AC	Zen	AM
Stutz DV 32	5240	134½	Own		O	8	3⅜x4½	322	5.10	36.4	155@3900	Alum	9	Wal	Ste	Sch	AM
Willys 6-97-98 D	*	110–113	Own	Var	L	6	3¼x3⅞	193	5.26	25.3	65@3400	CI	4	—	AC	Til	Til
Willys 8-80 D	3131	121	Own	Var	L	8	3¼x4	245.4	5.26	31.25	80@3200	CI	5	—	AC	Til	Til
Willys-Knt. 66-D	3400	121	Own	Var	K	6	3⅜x4¾	255	5.26	27.3	87@3200	*Alum	7	Ski	Til	Til	Til
Willys-Knight 95	3122	113	Own	Pines	K	6	2⅛x4⅜	177.9	5.55	20.7	60@3400	*Alum	7	*	AC	Til	AC

STANDARD OIL GROUP HEARS TALK ON TIRES

Long Branch, N. J., July 22.—More than one hundred Monmouth county employees of the Standard Oil Company of New Jersey gathered in the Garfield-Grant Hotel here to participate in a new type of sales training.

E. M. Tilley, Newark, in charge of tire sales in New Jersey, presented a talking picture prepared for use in a training course for salesmen.

The film, instead of being purely technical, depicts the efforts of two young men to establish a business, and through that medium imparts its instructions.

NASH DEALER APPOINTED

Montgomery, Ala., July 22 (UTPS).—The Gentry Motor Company of 312 Molten Street, has been appointed a Nash dealer here, serving under Jefferson Motors of Birmingham, distributor.

PRODUCTION UP 10 PER CENT. FOR PITTSBURGH CRUCIBLE

Midland, Pa., July 22.—With the relighting of four furnaces in the open hearth department, after a shutdown of two weeks, an increase of 10 per cent. in the production schedules at the local plant of the Pittsburgh Crucible Steel Company is indicated. A. L. Sonnhalter, general superintendent, says the company's Nos. 1 and 2 mills resumed operations last week, while the bar mill will be reopened during the current week.

TIRE MANAGER NAMED

Pontiac, Mich., July 22.—Sam W. Dance of Fort Wayne, Ind., has been appointed manager of the Huron Tire Company of Birmingham, Mich., succeeding E. S. Barden, according to announcement here. Mr. Barden will assume new duties with the Detroit branch of the Goodyear Tire and Rubber Company.

N. J. TRAFFIC HEAD FAVORS REASON RULE

Belmar, N. J., July 22.—Russell S. Wise, chairman of the State Traffic Commisson, believes the motor vehicle laws should be revised "to apply the rule of reason rather than arbitrary regulation."

Wise told members of the Tri-County Association here that only 10 per cent. of the motorists obeyed "stop" signs, and no one attempted to obey the law on a ten-mile limit in passing school houses or fifteen miles in residential sections.

"There would be fewer accidents," he said, "if traffic were speeded up."

RETURNS TO HUDSON-ESSEX

Meriden, Conn., July 22.—Isaac J. Gracey has again become Meriden dealer for Hudson-Essex, with showrooms on the North Colony road. Mr. Gracey previously held the Hudson-Essex franchise for a long period.

WEST COAST M. C. D. A. PERSONNEL CHANGES

San Francisco, July 22 (UTPS).—Due to the recent death of Col. W. F. Culberson, veteran automobile distributor, a number of new appointments in the executive personnel of the San Francisco Motor Car Dealers' Association have been necessary, states William L. Hughson, president of the dealer group.

J. E. French, president of the J. E. French Company, succeeds Col. Culberson as treasurer for the organization and C. J. Simpson, vice president and general manager for the Pacific Nash Motor Company takes the chairmanship of the finance committee.

DANBURY SERVICE MOVES

Danbury, Conn., July 22.—Collins Auto Company, complete service, storage and rental, has moved from 11 Ives St. to 284 Main St. Martin M. Collins is proprietor.

OF PRESENT AMERICAN PASSENGER CAR MODELS

Make and Model	Front End Drive	Ignition System	Gen. and Starter	Clutch	Transmis'n and Speeds	Universals	Rear Axle	Ratio	Brakes	Steering Gear	Spring Rear	Springs Shackles	Chassis Lubric.	Tires
Auburn 8-98	Chain	Del-R	*Del-R	Long	D-SM-F 3	Un P	Col ½	*4.45	S D	Ross	S 56¾	Own	Bijur	17x5.50
Austin	Gear	Aut-L	*Aut-L	Rock	War-G 3	Spic	Sal ½	5.25	M	Say-B	Cant	Own	Al-Z	18x3.75
Buick 8-50	Tex	Del-R	Del-R	Own	Mun-SM 3	Own	Own ½	4.54	Bendix	Sag	S 54½	Tryon	Al-Z	18x5.25
Buick 8-60	Tex	Del-R	Del-R	Own	O-SM 3	Own	Own ¾	4.45	M	Sag	S 55¼	Own	Alem	19x5.50
Buick 8-80	Tex	Del-R	Del-R	Own	O-SM 3	Own	Own ¾	4.27	M	Sag	S 58⅞	Own	Al-Z	19x6.50
Buick 8-90	Tex	Del-R	Del-R	Own	O-SM 3	Own	Own ¾	4.27	M	Sag	S 58⅞	Own	Al-Z	19x6.50
Cadillac V-8	Morse	Del-R	Del-R	Own	O-SM 3	Spic	Own ¾	4.75	Own-M	Sag	S 58	Own	Al-Z	19x6.50
Cadillac V-12	Morse	Del-R	Del-R	Own	O-SM 3	Spic	Own ¾	——	Own-M	Sag	S 58	Own	Alem	19x7.00
Cadillac V-16	Morse	Del-R	Del-R	Own	O-SM 3	Spic	Own ¾	4.39	Own	Sag	S 60	Own	Alem	19x7.00
Chevrolet	Var	Del-R	*Del-R	Own	Own 3	Own	Own	4.10	M	Sag	S 54	——	Alem	19x4.75
Chrysler 6	Morse	Del-R	Del-R	Own	Own-F 3	Un P	Own ½	4.60	H	War	S 53⅞	Tryon	Al-Z	19x5.25
Chrysler 8	Morse	Del-R	Del-R	—	Own-F 4	—	Own ½	4.10	H	War	S 54⅝	——	Al-Z	17x7.50
Chrysler 8 De L.	Morse	Del-R	Del-R	—	Own-F 4	—	Own ½	4.30	H	——	S 54⅝	——	Al-Z	17x6.50
Chrysler Imperial 8	Morse	Del-R	Del-R	—	Own-F 4	—	Own ½	3.81	H	Ross	S 57½	——	Al-Z	18x7.00
Cord (Fr. Wh. Dr.)	Link	Del-R	*Del-R	Long	Detr 3	UnP&MM	Col F	4.80	H	Gem	S 62	Own	Bijur	18x7.00
De Soto Six	Var	Del-R	Del-R	Borg	Own-F 3	—	Own ½	4.33	H	Own	S 53⅛	——	Al-Z	19x5.00
De Soto Eight	Var	Del-R	Del-R	Borg	Own-F 3	—	Own ½	4.60	H	Own	S 54⅝	Rub B	Al-Z	19x5.25
De Vaux 6-75	Morse	Aut-L	*Aut-L	Borg	NP 3	Spic	NP ½	4.40	S D	NP	S 54¼	Tryon	Al-Z	19x5.00
Dodge Six	Morse	Del-R	Del-R	Borg	Own-F 3	Spic	Own ½	4.60	H	War	S 55¼	Tryon	Al-Z	19x5.00
Dodge Eight	Morse	Del-R	Del-R	Borg	Own-F 3	Spic	Own ½	4.60	H	War	S 54⅝	Rub B	Al-Z	18x5.50
Durant 610	Morse	Aut-L	*Aut-L	Borg	W C 3	Spic	Own ½	3.96	S D	Own	S 55	Tryon	Al-Z	19x5.00
Durant 612	Morse	Aut-L	*Aut-L	Borg	W C 3	Spic	Own ½	4.45	S D	Own	S 55	Tryon	Al-Z	19x5.00
Durant 614	Morse	Aut-L	*Aut-L	Borg	W C 3	Spic	Own ½	4.45	S D	Own	S 55	Tryon	Al-Z	19x5.00
Durant 619	Morse	Aut-L	*Aut-L	Borg	W C 3	Spic	Own ½	3.90	S D	Own	S 54	Tryon	Al-Z	19x4.75
Essex Super Six	Morse	Aut-L	*Aut-L	Own	Own-F 3	Spic	Own ½	5.40	Bendix	Gem	S 54⅛	Own	Alem	19x5.00
Ford A	Var	Own	*Own	Own	Own 3	Own	Own ¾	3.78	M	Gem	S Tr39	Own	Al-Z	19x4.75
Franklin S 15 Trans.	Chain	Del-R	*Del-R	Br-L	**	MM	Own ½	‡4.54	H	Gem	El 42	None	Al-Z	19x6.50
Franklin S 15 Trans.	Chain	Del-R	*Del-R	Br-L	**	MM	Own ½	‡4.54	H	Gem	El 42	None	Al-Z	19x6.50
Franklin S 15 De L	Chain	Del-R	*Del-R	Br-L	War-G	Spic	Own ½	‡4.73	H	Gem	El 42	None	Al-Z	19x6.50
Graham Pros. 6	Link	Del-R	*Del-R	Long	F 3	—	——	4.45	H	Ross	S 54	ERS	Al-Z	19x5.00
Graham Std. 6	Link	Del-R	*Del-R	Long	F 3	—	——	4.30	H	Ross	S 54	ERS	Al-Z	5.50x18
Graham Spl. 6	Link	Del-R	*Del-R	Long	F 4	—	——	4.09	H	Ross	S 54	ERS	Al-Z	6.00x17
Graham Spl. 8	Link	Del-R	*Del-R	Long	F 4	—	——	4.09	H	Ross	S 54	ERS	Al-Z	6.00x17
Graham Cust. 8	Link	Del-R	*Del-R	Long	F 4	—	——	4.09	H	Ross	S 56	ERS	Al-Z	6.50x18
Hudson Greater 8	Morse	Aut-L	*Aut-L	Own	Own-F 3	Spic	Own ½	4.75	Bendix	Gem	S 54⅛	Own	Alem	18x5.50
Hupmobile Cen 6	Chain	Aut-L	*Aut-L	Borg	War-G-F 3	MM	Sal ½	4.70	S D	Ross	S 53	Tryon	Al-Z	19x5.50
Hupmobile Cen 8	Morse	Aut-L	*Aut-L	Borg	War-G-F 3	Un P	Sal	4.55	S D	Ross	S 52¾	Rub B	Al-Z	19x5.50
Hupmobile C	Morse	Aut-L	*Aut-L	Long	War-G-F 3	Un P	Own ½	4.55	S D	Ross	S 54	Own	Alem	19x6.00
Hupmobile H and U	Morse	Aut-L	*Aut-L	Long	War-G F 3	Un P	Own ½	4.07	S D	Ross	S 57	Own	Alem	19x6.50
La Salle V-8	Morse	Del-R	Del-R	Own	O-SM 3	Spic	Own ¾	4.75	Own-M	Sag	S 58	Own	Alem	19x6.50
Lincoln	——	Aut-L	*Aut-L	Long	Own-F 3	Spic	Tim F	4.58	Bendix	Own	S 62	Own	Alem	7.00x19
Marmon Eight-70	Diam	Del-R	*Del-R	Rock	War-G-F 3	Spic	Sal ½	4.70	Bendix	Ross	S 54⅛	Tryon	Al-Z	29x5.50
Marmon 88	Diam	Del-R	*Del-R	Rus	Detr-F 3	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B	Al-Z	19x6.50
Marmon 16	Diam	Del-R	Del-R	Rus	Mun-F	Spic	Sal ½	3.78	Bendix	Ross	S 60	Rub B	Al-Z	18x7.00
Nash 960	Cel	Aut-L	*Aut-L	Borg	O-SM 3	Own	Own ½	4.73	M	Ross	S 50⅞	——	Alem	19x5.00
Nash 970	Diam	Aut-L	*Aut-L	Borg	O-SM 3	Own	Own ½	4.73	M	Ross	S 50⅞	——	Alem	19x5.25
Nash 980	Diam	*Aut-L	*Aut-L	Borg	O-SM 3	Own	Own ½	4.46	M	Gem	S 55	——	Bijur	18x6.00
Nash 990	Diam	*Aut-L	*Aut-L	Borg	O-SM 3	Own	Own ½	4.50	M	Gem	S 57⅛	——	Bijur	19x6.50
Oakland V-8	Morse	Del-R	Del-R	Own	M-SM 3	MM	Own ½	3.90	M	Sag	S 54½	Inlox	Al-Z	28x5.50
Oldsmobile	Chain	Del-R	Del-R	Borg	M-SM 3	Un P	Own ½	4.54	Bendix	Sag	S 54½	Tryon	Alem	28x5.25
Packard 901-902	Morse	—	——	——	O-SM 4	—	Own ½	—	M	Own	S 60½	——	Bijur	6.50x19
Packard 903-904	Morse	—	——	——	O-SM 4	—	Own ½	—	M	Own	S 60½	——	Bijur	7.00x19
Peerless St. 8	Morse	Aut-L	*Aut-L	Rock	War-G-F 3	Spic	Sal ½	4.70	Bendix	Ross	S 56⅜	Rub B	Alem	29x5.50
Peerless Master 8	Morse	Aut-L	*Aut-L	Rock	War-G-F 3	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B	Alem	31x6.00
Peerless De L.	Morse	Aut-L	*Aut-L	Rock	War-G-F 3	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B	Alem	31x6.00
Peerless Custom 8	Morse	Aut-L	*Aut-L	Rock	War-G-F 3	Spic	Sal ½	4.45	Bendix	Ross	S 60	Rub B*	Alem	31x6.50
Pierce-Arrow 43	Gear	Del-R	Del-R	Long	OwnF 3	Spic	Own ½	4.08	Bendix	Ross	S 60	Faf	Al-Z	19x6.50
Pierce-Arrow 41-42	Chain	Del-R	Del-R	Long	Own-F 3	Spic	Own ½	*	Bendix	Ross	S 61	Faf	Al-Z	18x7.00
Plymouth	Var	Del-R	Del-R	Borg	Own-F 3	Own	Own ½	4.33	H	War	S 53⅜	Tryon	Al-Z	19x4.75
Pontiac	Morse	Del-R	Del-R	Own	Own 3	MM	Own ½	3.90	M	Sag	S 54	Inlox	Al-Z	29x5.00
Reo Royale 8-35	Morse	Del-R	Del-R	Long	O-SM 3	Un P	Own ½	4.07	H	Ross	S 57½	Own	Far	6.50x18
Reo Royale 8-31	Morse	Del-R	Del-R	Long	O-SM 3	Un P	Own ½	4.07	H	Ross	S 57½	Own	Al-Z	6.50x18
Reo 8-21	Link	Del-R	Del-R	Long	O-SM 3	Un P	Own	4.42	H	Ross	S 56⅛	Tryon	Al-Z	17x6.00
Reo 6-21	Morse	Del-R	Del-R	Long	O-SM 3	Un P	Own	4.07	H	Ross	S 56⅛	Tryon	Al-Z	17x6.00
Reo Fly. Cloud 6-25	Morse	Del-R	*Del-R	Long	O-SM 3	Un P	Own ½	4.42	H	Ross	S 55¾	Own	Al-Z	17x6.50
Studebaker Six	Chain	Del-R	*Del-R	Long	Own-F 3	Spic	Own ½	4.73	Bendix	Ross	S 54	Tryon	Alem	19x5.25
Studebaker Dict. 8	Var G	Del-R	*Del-R	Long	Own-F 3	Spic	Own ½	4.73	Bendix	Ross	S 54	Tryon	Alem	19x5.25
Studebaker Com. 8	Var G	Del-R	*Del-R	Long	Own-F 3	Spic	Own ½	4.73	Bendix	Ross	S 56	Faf	Al-Z	19x6.00
Studebaker Pres. 80	Var G	Del-R	Del-R	Long	Own-F 3	Spic	Own ½	4.31	Bendix	Ross	S 60	Faf	Al-Z	19x6.50
Studebaker Pres. 90	Var G	Del-R	Del-R	Long	Own-F 3	Spic	Own ½	4.31	Bendix	Ross	S 60	Faf	Al-Z	19x6.50
Stutz LA	——	Del-R	Del-R	Borg	Detr 4	Un P	Sal ½	4.75	H	Gem	S 60	Own	Bijur	19x6.00
Stutz MA	——	Del-R	Del-R	Long	Detr 4	MM	Tim ½	4.75	H	Gem	S 62¼	Own	Bijur	20x6.50
Stutz MB	——	Del-R	Del-R	Long	Detr 4	MM	Tim ½	4.75	H	Gem	S 62¼	Own	Bijur	20x7.00
Stutz DV 32	——	Del-R	Del-R	Long	Detr 4	MM	Tim ½	4.75	H	Gem	S 62¼	Own	Bijur	18x7.00
Willys 6-97-98 D	Chain	Aut-L	*Aut-L	Borg	Own-F 3	Spic	Own ½	4.60	Bendix	Own	S 49⅜	Tryon	Alem	19x5.00
Willys 8-80 D	Chain	Aut-L	*Aut-L	Borg	Own-F 3	Spic	Own ½	4.40	Bendix	Ross	S 56	Tryon	Alem	18x5.50
Willys-Knight 66 D	Chain	Aut-L	*Aut-L	Rock	Own-F 3	Spic	Own ½	4.18	Bendix	Ross	S 56	Tryon	Alem	18x6.00
Willys-Knight 95	Chain	Aut-L	Aut-L	Borg	Own-F 3	Spic	Own ½	4.89	Bendix	Gem	S 51	Tryon	Alem	19x5.00

KEY TO ABBREVIATIONS

Weight—‡Austin standard 2 passenger coupe. **Hupmobile model H weighs 4,095 pounds, and model U 4,360 pounds. *Studebaker, 7 pass. sedan. *Willys 6-97D weighs 2,670 and the 98 D weighs 2,706 pounds.

Wheel Base—*Over all length of chassis instead of wheel base, which manufacturers refuse to give. **Essex, seven-passenger sedan available on 119-inch wheel base.

Engine Make—Con, Continental; Lyc, Lycoming; Hall, De Vaux-Hall Motors Corp.

Thermostat—Bish-Bab, Bishop & Babcock; Dole, Dole Valve Co., Chicago, Ill.; Ful, Fulton Co.; Pines, Pines Winterfront; Var, various makes.

Valve Arrangement—L, L head; H, horizontal; O, overhead; K, sleeve valve; LV, V-type L head.

*Air cooled. †Thermo syphon water circulation

Compression Ratio—*Optional on the Auburn.

Piston Material—*Alum, aluminum with invar struts; Alum, aluminum alloy; CI, cast iron; S St, semi-steel.

Oil Purifier—Pur, Purolator; Wal, Wall; Han, Handy; AC, AC Spark Plug Company; Ste, Stewart-Warner; Ski, Skinner. *Using both Floato & Skinner.

Fuel Cleaner—AC, AC Spark Plug Co.; Gas, Gascolator; Ste, Stewart-Warner; Til, Tillotson; V-S, Van Sicklen.

Carburetor—Sch, Wheeler Schebler; Zen, Zenith; Mar, Marvel; Car, Carter; Str, Stromberg; DL Detroit Lubricator; Til, Tillotson.

Air Cleaner—AC, AC Spark Plug Company; AM, Air Maze; Han, Handy; Un, United; Til, Tillotson.

Front End Drive—Link, Link Belt; Tex, Texolite; Cel, Celeron; Diam, Diamond Chain; Morse, Morse Chain Company; Var, various makes of chains; Var-G, various makes of gears.

Ignition, Generator and Starter—Aut-L, Auto-Lite; Del-R, Delco-Remy; N. E., North East; *Nash-Indicates twin ignition.

*Bendix starter used.

Clutch—Borg, Borg & Beck; Br-L, Brown-Lipe; Rock, Rockford Machine; Long, Long Clutch Company; Rus, Russell Mfg. Co.

Transmission—War G., Warner Gear Company; Detr, Detroit Gear; Mun, Muncie Gear; WC, Warner Corporation; D-SM—Detroit Synchro-Mesh; O-SM—Own, Synchro-Mesh; M-SM—Muncie. Synchro-Mesh. N.P.—New Process Gear Corp.

**F-Free Wheeling.

**Franklin Transcontinent models are equipped with both Warner and Detroit 3 or 4 speed gear sets according to body type.

Universals—Un P, Detroit Universal Products Company; Spic, Spicer Manufacturing Corporation; MM, Mechanics Universal Joint Company.

Rear Axle—Col, Columbia; Sal, Salisbury; Tim Timken; N.P., New Process Gear Corp.; ½-Semi-floating; ¾-¾ floating; F-Full floating.

Ratio—Optional on the Auburn. *On Pierce Arrow 43, 137 in W. B. rear axle ratio is 4.42. On model 41 rear axle ratio is 4.42. On model 42 ratio is 4.23.

‡The axle ratio varies with body types on Franklin models.

Brakes—H, hydraulic; M, mechanical; SD, steeldraulic; Bendix, Bendix Brake Corp.

Steering Gear—Gem, Gemmer; Ross, Ross Gear and Tool Company; Sag, Saginaw; Say-B, Saylor-Beall Manufacturing Company; War, Warner; N.P., New Process Gear Corp.

Rear Springs—S, semi-elliptic; El, full elliptic; Cant, semi-cantilever; S-Tr, semi-transverse. *Rear spring length on Willys, 6-98D is 51 in.

Spring Shackles—Tryon, Willys-Morrow Company; Rub B, Rubber Shock Insulator Company; Faf, Fafnir Bearing Company; ERS, Eaton Rubber Bushings; Inlox—Inland Mfg. Co.

Chassis Lubricator—Alem, Alemite; Al-Z, Alemite Zerk; Bijur, Bijur Lubricating Corp.; Far, Farval.

BUSES WIN AGAIN

Southington, Conn., July 22.—The Connecticut Company has been granted permission by the Public Utilities Commission to substitute motor coach service for the trolley line through this town from Meriden to Lazy Lane.

NEW JERSEY RETAINS 6TH PLACE IN EXPORTS

Trenton, N. J., July 22.—Despite a decline in exports of $75,858,855 in 1930 under the previous year, New Jersey retained its rank of sixth among the states in the value of its exports, according to figures released today by the Department of Commerce.

During 1930, New Jersey's exports were valued at $186,840,362, compared to $262,699,217 in 1929, the figures revealed.

Copper manufactures lead all products in value among New Jersey's 1930 exports, their value being $20,532,041. Lubricating oil ranked second, with a value of $20,325,985; automobile parts third, $14,011,496, and lard fourth, $12,655,576.

Other important New Jersey exports were electric apparatus, motor trucks and buses, industrial machinery and passenger automobiles.

NEW HAVEN'S FREIGHT SERVICE SPEEDED UP BY TRUCK FEEDER AID

SPRINGFIELD, Mass., July 22.—"Accept today—deliver tomorrow" is the keynote of a revamping of the entire less-than-carload freight service which is taking place on the New Haven Railroad, the final step of which goes into effect today, providing next day's delivery from any point on its lines to any other point on its line with very few exceptions.

The inauguration of the "accept today—deliver tomorrow" plan is made possible by an extension of the basic principles used in placing the Speed Witch and the Maine Bullet in service. Both of these trains were made possible through the use of motor trucks which are used to feed and distribute freight to and from points of concentration and distribution, thus serving territory to the maximum. The concentration points for the "accept today—deliver tomorrow" plan of the railroad are Boston, Providence, New London, New Haven, Hartford, Pier 37, New York; Bridgeport, Putnam, Worcester and Waterbury.

The plan has been placed in service in successive stages, the first put into effect on June 22, between the concentration point of Boston and Pier 37 East River, New York city. On June 30 it was placed in operation at New Haven and Providence, on July 6 at Hartford and Bridgeport, and today the remainder of the concentration points will be in operation.

The motor truck portion of the operation is handled by the New England Transportation Company, the highway subsidiary of the New Haven Railroad. That company now has in operation ninety-two trucks, eighteen tractors and thirty-three semi-tractors, and the new service will be started with that equipment. The situation will be watched closely with the intention of placing additional equipment in service as the need for it develops in the working out of the new overnight service.

The only exceptions on the New Haven system which will not have the benefit of overnight service to all other points are stations on the cape south of Middleboro and stations on the old Central New England west of Danbury and Millerton, where second-day delivery will prevail.

The new service is designed primarily to meet the competition of motor trucks.

AMERICAN CABLE GETS GOLDEN GATE CONTRACT

San Francisco, July 22.—More than 174,000 miles of wire will be used to spin the two 10,937-ton main cables and suspender ropes that will swing the world's largest suspension bridge across the Golden Gate here. The contract for this wire has just been let to the American Cable Company, an associate of the American Chain Company, Inc.

BOWERS ACQUIRES OTHER COUNCIL BLUFFS FORD UNIT

Council Bluffs, Ia., July 22.—The Bowers Motor Company has acquired the Bluffs Motor Company, 126 East Broadway, and for the present will be maintained as a separate sales organization. Bluffs Motor was owned by the McFayden interests of Omaha and was handling Ford sales also. Chester A. Bowers says if it develops that the city can maintain two Ford sales units the staffs will be combined.

DEUBLE WITH RÄHLFS SALES

Cleveland, O., July 22.—Glenn Deuble, a pioneer in the automobile business, and for the past few years identified with the distribution of Oakland-Pontiac in northern Ohio, has joined the Rahlfs Motor Sales, Inc., Oakland-Pontiac distributor, with headquarters at 1924 Euclid Ave., as retail sales executive.

PURCHASES GARAGE

Ackley, Ia., July 22.—John Boheman has purchased the garage and auto accessory store owned by Gus Esser and the late Roberts Young. Mr. Esser has been maintaining the garage since Mr. Young's death a month ago and will retain the Dodge cars sales contract until the franchise expires.

Insuring Wholesalers' Profits With Trucks

This report on economical truck operation in the wholesale field was prepared by the General Motors Truck Company, Pontiac, Mich., and is appearing in serial form in Automotive Daily News. Copies of this report in pamphlet form are now available at all General Motors Truck Company dealer and distributorships.

THE wholesaler who has analyzed his truck operation from the standpoint of time and of profitable work accomplished may find that one or more of his trucks is unsuited for rapid, economical delivery on the routes to which it is assigned.

For example, a truck may prove unprofitable, even when it is relatively new, from any of these causes:

1. Excessive operating cost.
2. Insufficient speed.
3. Incorrect capacity.
4. Unsuitable body design.

In many cases these deficiencies may be remedied by shifting routes, by changing trucks from one job to another, or by making slight alterations in the equipment itself. For example, a slow-moving truck may not prove profitable for deliveries in a suburban zone, for it is able to cover only a limited number of miles and deliver a limited number of orders each day. That same truck, however, may prove quite satisfactory for short depot hauls through congested traffic where the speed of the fastest truck is no greater than that of a slow one.

Profit Depends on Suitability

Such shifts and changes, however, do not always prove practical, nor do they always eliminate the difficulty. A truck which is undercapacity for handling a profitable delivery load; a truck which cannot cover its routes rapidly and effectively; a truck which creates high running expense and repair bills—none of these is likely to prove a profitable truck to own and operate.

All of these facts point to the basic importance of careful study before trucks are purchased, with a view to buying equipment which is suited to the job it will be called upon to do. A truck which is unsuited to the job which it is called upon to handle is always an unprofitable truck.

Only the truck which can produce a maximum of work at a minimum cost, because it is exactly suited to the job, is the most profitable truck to own and operate.

During this investigation, repair records and cost records of scores of wholesalers' trucks were viewed and analyzed. Many sources of loss were uncovered, some of which came up again and again in different wholesale establishments.

A Sound Operating Plan

Sound truck operation holds tremendous possibilities for profit in wholesale movement of goods. Getting sound operation is a relatively simple task which will pay the wholesaler attractive dividends. But until definite steps are taken to place truck operation on a sound basis and to capitalize the possibilities of truck transportation, the average wholesaler can never capitalize these profit possibilities.

The topics discussed in this report form a sound working basis to guide the wholesaler in improving his operation. The steps he should take are as follows:

1. Make a thorough time study of every phase of the truck operation with a view to eliminating costly time losses. Time is the most valuable factor in truck operation. Every minute saved means more profitable work accomplished at lower cost.

2. Analyze the delivery area, sources of supply, truck routing, load handling, and other factors which bear on economical movement of goods with increased profits. Money can be saved in almost every phase of the wholesaler's business by more rapid, economical movement of goods. The truck is a flexible, economical form of transportation for use toward this end.

3. Establish some effective system of controlling expense and stimulating work accomplished in truck operation. Records in themselves are of little value, but as a measure of results and as a guide to better results, they are invaluable.

4. Set up and carry out a sound buying procedure. Haphazard buying based on whim or prejudice leads to losses. Buying from the standpoint of applying the right truck to the job results in profitable purchases. The truck owner's greatest opportunity to improve his operation comes at the time he purchases new truck equipment.

Buying Profitable Truck Transportation

Every buyer of truck equipment should be buying years of satisfactory truck service at low cost. The profits to be had from delivery with truck equipment suited to the wholesaler's needs are such that they far outweigh other factors in the purchase of equipment—important as those other factors may be.

The wholesaler who feels he has not the time nor the knowledge of truck transportation problems to analyze clearly for himself his own needs will do well to demand that the truck manufacturer's representative study these needs and make recommendations for improved operation. Time spent on such an analysis will be used to far better advantage than any number of hours consumed in arguing and discussing the merits of individual trucks.

Only buying based on an accurate knowledge of the wholesaler's specific needs will insure the purchase of equipment that provides satisfactory service, at low cost, over a long period of years.

ARE YOUR TRUCKS PROFITABLE?

Check your present trucks against these items and weigh carefully their ability to handle their work economically. Do any of your present trucks

—use an excessive amount of gasoline or oil?
—require excessive service for minor repairs?
—show signs of needing major repairs?
—disrupt deliveries by breakdowns and troubles?
—suggest lack of cleanliness in handling orders?
—slow up deliveries?
—make good drivers dissatisfied with their jobs?

If so, weigh those losses against more suitable equipment which will

—lower running expense.
—deliver more orders, more rapidly.
—reduce delays, breakdowns and shop expense.
—suggest clean, efficient handling of orders.
—advertise your store to customers and their neighbors.
—give promise of trouble-free delivery in the future.
—raise the driver's morale and increase his effort.
—build customer good-will.
—increase the number of deliveries on each route.

BINGHAMTON TO REPLACE STREET CARS WITH BUSES

Binghamton, N. Y., July 22.—Plans are in progress for removal of street cars from the streets of this city by the Triple Cities Traction Company, which will inaugurate late this year a system of bus routes extending into the outlying sections. This is one of the largest city bus systems to be started in New York state in several years and will require a large amount of new rolling stock.

HEAR THREE PETITIONS FOR BAY STATE BUSES

Boston, Mass., July 22.—Petition of the Milford Electric Light and Power Company for an additional issue of stock was heard by the State Department of Public Utilities Monday afternoon.

Petition of the Fitchburg & Leominster Street Railway Company for the operation of a bus line between Fitchburg and Whalom Park was heard Tuesday afternoon.

This noon the commissioner heard the petition of the Worcester Consolidated Street Railway Company for bus routes in Worcester and Charlton and for a track location in Worcester.

TWENTY NEW BUSES ORDERED FOR MONTREAL TRAMWAYS

Montreal, Que., July 22.—Montreal Tramways Company has ordered twenty new buses of modern design, fifteen from the Associated Equipment Company of Canada, and five from the Leyland Company. The chassis will be manufactured in England, and the bodies made by the Canadian Car and Foundry Company in Montreal. The company has on order two Diesel direct drive engines suitable for bus operation. These engines, however, are still in the trial stage in England, and it will likely be another year before Montreal Tramways uses them in its service.

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